Company Environmental Science and Engineering Solutions

ph (802) 229-4600 fax (802) 229-5876

100 State Street, Suite 600 Montpelier, VT 05602

www.johnsonco.com

February 25, 2013

Ms. Patricia Coppolino Vermont Department of Environmental Conservation 1 National Life Drive – Davis 1 Montpelier, VT 05620-3704

Re: October 2012 Groundwater Sampling

Former Jard Company Site Bennington, Vermont SMS #VTD048141741 JCO Project #: 3-2218-5

Dear Ms. Coppolino:

This letter provides a summary of site investigation activities performed by The Johnson Company at the Former Jard Company Site in Bennington, Vermont (the Site) as specified by the approved Scope of Work dated October 4, 2012. These activities included mapping surface water features, installing piezometers, measuring water levels, and collecting groundwater samples. Details of the work performed and a summary of the results are provided below and in the attached tables and figures.

SUMMARY OF WORK PERFORMED

Piezometer Installation and Surveying

A handheld GPS was used to map surface water features (streams and ponds) in the wetlands west of Park Street and in the forested area near the Plasan facilities on October 10-11, 2012. These features are shown on Figures 1-4. After mapping of the surface water features, four piezometers were installed the wetlands and three piezometers were installed in the forested area. Seven piezometers were installed in the Roaring Branch. A summary of the 14 piezometer locations is provided in the table below. Note that the Roaring Branch has changed course since the date of the aerial photo shown in Figures 1-4, and the locations of some piezometers relative to the Roaring Branch appear to be different than the descriptions below, which were accurate at the time of installation.

Piezometer	Description
Name	
PZ-15	Apparent groundwater discharge area east of beaver pond adjacent to 78
TZ-13	Bowen Road parking lot
PZ-16	Southern edge of pond between Park Street and 78 Bowen Road
PZ-17	Apparent groundwater discharge area north of Bowen Road, between
1 Z-1 /	Plasan facilities
PZ-18	Apparent groundwater discharge area at eastern edge of wetland area
PZ-19	Within flowing water, in wetland area
PZ-20	Apparent groundwater discharge area in wetlands

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Piezometer	Description
Name	
PZ-21	Within stream, at edge of wetland area
PZ-101	North side of Roaring Branch, replacement of PZ-01
PZ-102	North side of Roaring Branch, replacement of PZ-02
PZ-103	North side of Roaring Branch, replacement of PZ-03
PZ-104	North side of Roaring Branch, replacement of PZ-04
PZ-105	North side of Roaring Branch at Park Street Bridge, replacement of PZ-05
PZ-106	South side of Roaring Branch, replacement of PZ-06
PZ-107	North side of Roaring Branch, most downstream location

The location of the new piezometers was recorded using a GPS with submeter accuracy on December 3, 2012. An autolevel was used to survey the top-of-pipe elevation of the piezometers relative to nearby monitoring wells. The elevations of 11 monitoring wells installed by EPA were also measured relative to wells that were included in the 2010 survey.

Water Level Measurement and Groundwater Sampling

The depth to water was measured in all monitoring wells and piezometers using an electronic water level meter on October 17, 2012. Monitoring wells MW-3 and MW-3D were checked for the presence of non-aqueous phase liquid (NAPL) with a bailer.

Samples were collected from 28 groundwater monitoring wells and 8 piezometers on October 17-21, 2012. Monitoring well EPA-9 was dry and could not be sampled. With the exception of MW-3, a peristaltic pump was used to purge water from the monitoring wells, with the intake positioned at the approximate midpoint of the saturated portion of the well screen. At 5-minute intervals, readings were taken of water temperature, pH, oxidation-reduction potential (ORP), specific conductance, and turbidity. Samples were collected after stabilized parameters were observed over three or more consecutive readings. Piezometers PZ-12 through PZ-15 yielded sufficient flow to sample using the same method as the monitoring wells. The remaining piezometers were purged dry, and a sample was collected of the recharge. Field duplicates were collected from two monitoring wells and one piezometer. Purge water was placed in two 55-gallon drums for off-site disposal. The drums were removed from the Site on November 8, 2012 by Precision Industrial Maintenance, Inc. of Schenectady, New York, and transported to CycleChem, Inc. in Elizabeth, New Jersey under a non-hazardous waste manifest (attached).

Samples were analyzed for polychlorinated biphenyls (PCBs) by EPA Method 8082 at Pace Analytical, Inc. in Schenectady, New York. After receipt of these sample results, seven samples were analyzed for PCB homologs by EPA Method 680. The laboratory reports are attached.

RESULTS

Results are presented in four tables and four figures:

- Table 1 presents depth-to-water measurements and calculated groundwater elevations for monitoring wells and piezometers.
- Table 2 presents the vertical groundwater gradient directions at the piezometers.
- Table 3 presents laboratory results of groundwater samples analyzed for PCB Aroclors.

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- Table 4 presents laboratory results of samples analyzed for PCB homologs.
- Figures 1 and 2 present interpreted potentiometric contours for shallow and deep monitoring wells, respectively.
- Figure 3 and 4 present the reported PCB concentrations for shallow and deep monitoring wells, respectively.

Groundwater Elevations

The groundwater elevation across the site was higher than in April 2012, with an average water level increase of approximately 0.5 feet. Consistent with previous results, the hydraulic gradient at the Site was to the northwest, with an average magnitude of approximately 0.017 ft/ft near the water table, and 0.012 ft/ft in deeper wells. Surface water levels and piezometer water levels indicated upward vertical gradients in the four locations in the forested area near Plasan, in the Park Street ditch, in the Duck Pond, at the northernmost two locations in the wetland, and at the most downstream location (PZ-107) in the Roaring Branch. Water levels indicated downward vertical gradients at the southernmost two locations in the wetland, and in the entire Roaring Branch except at PZ-107.

Overall Extent of PCBs in Groundwater

The sampling of 12 new monitoring wells and 5 new piezometers, combined with improved laboratory sensitivity, resulted in a demonstrated areal extent of PCB contamination that is larger than was reported in April 2012. In shallow wells and piezometers, PCBs were detected as far downgradient as PZ-20 and PZ-21, approximately 2,000 feet downgradient of the apparent source area near MW-3. In deeper wells, the extent of PCB detections was more limited but included one location, EPA-104D, to the west of Park Street.

Among the monitoring wells and piezometers that were sampled in April 2012, the frequency of PCB detections was greater in October 2012. In some cases, the additional detections were at concentrations lower than previous laboratory reporting limits of 0.3 to $0.5 \mu g/L$.

A more detailed discussion of sample results is provided below.

On-Site Wells

Approximately 0.5 feet of brown liquid was observed in the bailer lowered to the bottom of MW-3. The laboratory reported that three phases were present in the sample collected from this well: an oil phase, an aqueous phase, and a sludge phase. Analysis was performed on both the aqueous phase and the oil phase; the volume of sludge was insufficient for analysis. No NAPL was observed in MW-3D.

PCBs were reported at 349,000 mg/kg in the oil phase sample from MW-3 (34.9%), and at 364 mg/L in the aqueous-phase sample. The latter value is several orders of magnitude above reported values of PCB solubility, indicating that the phases may not have been completely separated before analysis.

With the exception of MW-6, on-site PCB concentrations were similar to past results. Despite lower laboratory reporting limits, PCBs were not detected in MW-4, MW-4D, or MW-2. The concentration in MW-3D was similar to April 2012. PCBs were detected in MW-1 at $1.54~\mu g/L$. PCBs were not detected at this location in April 2012, but were detected in September 2010 at $0.7~\mu g/L$. Upgradient of the apparent source area, PCBs were reported in EPA-3 at a concentration of $0.105~\mu g/L$, less than laboratory

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reporting limits associated with past samples. The reported concentration of PCBs in MW-6, 86.5 μ g/L, was more than double the reported concentration of 43 μ g/L in April 2012. The concentration in MW-6D was also elevated relative to April 2012, but was low relative to September 2010.

Little League Fields

Within the Little League fields, PCB concentrations were generally similar to those reported in August 2010 and/or April 2012. PCBs were detected for the first time in MW-11, at levels below previous laboratory reporting limits. The PCB concentration in MW-9D determined by EPA Method 8082 was more than double previously reported concentrations, whereas the concentration determined by EPA Method 680 was similar to past results.

Wetland Area / 403 Park Street Property

PCBs were not detected in new deep monitoring wells EPA-101, EPA-102, EPA-103, or EPA-105. PCBs were detected at similar concentrations in both of the piezometer samples (PZ-20 and PZ-21) and the one shallow well sample (EPA-104S) collected from this area. PCBs were reported present at $0.292~\mu g/L$ in EPA-104S in the sample analyzed by EPA Method 8082, but were not detected in the sample analyzed by EPA Method 680. The result obtained by Aroclor analysis is comparable to the concentration of $0.42~\mu g/L$ reported by Weston Solutions, Inc. in surface water sample SW-101, collected approximately 85 feet southwest of EPA-104S.

PCBs were reported at a concentration of 0.934 µg/L in EPA-104D.

Forested Area

PCBs remained present at elevated concentrations in MW-12: total PCBs were reported at $50.3 \,\mu g/L$ by EPA Method 8082, and $18.1 \,\mu g/L$ by EPA Method 680. PCBs were reported at low concentrations of 0.05 to $0.07 \,\mu g/L$ in newly installed piezometers PZ-16, PZ-17, and PZ-18. In EPA-106S, PCBs were reported at $0.305 \,\mu g/L$ by EPA Method 8082, but were not detected by EPA Method 680. PCBs were not detected in EPA-108S, PZ-12, or the newly installed deep monitoring wells EPA-106D, EPA-107, and EPA-108D.

Roaring Branch

Piezometers in the Roaring Branch were not sampled in October 2012. Water levels in piezometers PZ-101 through PZ-106 on October 17 indicated downward gradients from surface water to groundwater at these locations. In PZ-107, the depth to water in the piezometer was 0.1 feet less than outside the piezometer, indicating an upward gradient.

Water levels in the Roaring Branch were observed to rise sharply after heavy rainfall on October 19. PZ-107 was visited on October 20 to determine if it could be sampled, but the water level in the Roaring Branch was nearly above the top of the metal pipe, and the piezometer could not be safely accessed for measurement or sampling. On October 21, the depth to water was measured and was greater than the water level in the Roaring Branch, indicating a downward gradient.

PZ-103 was found to be destroyed after the rain event.

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SUMMARY

The Johnson Company installed and surveyed 14 piezometers, performed site-wide water level measurements, and collected samples from 28 monitoring wells and 8 piezometers. Sampling of the expanded groundwater monitoring network demonstrated a larger areal extent of detectable PCB concentrations in groundwater than was reported in April 2012, extending approximately 2,000 feet downgradient of MW-3.

Thank you for this opportunity to be of service to VT DEC. Please feel free to contact me if you have any questions or concerns regarding the work described in this letter.

Sincerely, THE JOHNSON COMPANY, INC.

By:_____

Daniel Baston, P.E.
Project Manager
E-mail: dpb@jcomail.com

Attachments

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TABLES

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T 4.	T 4 1	Top of Casing	7/29	9/2010	8/6	5/2010	8/3	0/2010	4/1	8/2012	10/2	17/2012
Location	Interval	Elevation (ft.) (1)	DTW (ft.)	Elevation (ft.)	DTW (ft.)	Elevation (ft.)	DTW (ft.)	Elevation (ft.)	DTW (ft.)	Elevation (ft.)	DTW (ft.)	Elevation (ft.)
EPA-3	Shallow	687.11	9.56	677.55	9.11	678.00	10.06	677.05	10.98	676.13	10.40	676.71
EPA-9	Shallow	683.91	Dry	< 672.39	10.97	672.94	Dry	< 672.39	Dry	< 672.39	Dry	< 672.39
EPA-100	Deep	683.06	not con	nstructed	not co	nstructed	not co	nstructed	not constructed		9.52	673.54
EPA-101	Deep	665.23	not con	nstructed	not co	nstructed	not co	nstructed	not co	not constructed		658.19
EPA-102	Deep	658.98	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	6.73	652.25
EPA-103	Deep	652.73	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	8.59	644.14
EPA-104S	Shallow	654.80	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	4.40	650.40
EPA-104D	Deep	654.54	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	4.24	650.30
EPA-105	Deep	646.35	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	7.81	638.54
EPA-106S	Shallow	653.70	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	4.43	649.27
EPA-106D	Deep	653.40	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	4.23	649.17
EPA-107	Deep	650.01	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	2.75	647.26
EPA-108S	Shallow	665.47	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	6.23	659.24
EPA-108D	Deep	665.71	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	6.35	659.36
MW-1	Shallow	680.05	9.26	670.79	9.05	671.00	9.80	670.25	10.60	669.45	9.80	670.25
MW-2	Shallow	684.68	7.44	677.24	6.91	677.77	8.06	676.62	8.77	675.91	8.05	676.63
MW-3	Shallow	685.75	8.78	676.97	not med	asured (2)	9.37	676.38	10.43	675.32	9.82	675.93
MW-3D	Deep	686.29	not con	nstructed	9.69	676.60	10.57	675.72	11.68	674.61	11.00	675.29
MW-4	Shallow	683.94	7.50	676.44	7.05	676.89	8.20	675.74	8.87	675.07	8.12	675.82
MW-4D	Deep	683.91	not con	nstructed	8.46	675.45	9.51	674.40	10.43	673.48	9.50	674.41
MW-6	Shallow	682.64	11.17	671.47	11.07	671.57	11.87	670.77	13.21	669.43	12.31	670.33
MW-6D	Deep	682.82	not con	nstructed	11.52	671.30	12.29	670.53	13.30	669.52	12.46	670.36
MW-8	Shallow	670.60	not con	nstructed	5.26	665.34	5.86	664.74	6.87	663.73	6.00	664.60
MW-9	Shallow	669.43	not con	nstructed	not co	nstructed	4.69	664.74	5.60	663.83	4.54	664.89
MW-9D	Deep	669.34	not con	nstructed	not co	nstructed	5.12	664.22	6.04	663.30	5.02	664.32
MW-10	Shallow	666.91	not con	nstructed	2.15	664.76	2.66	664.25	3.28	663.63	2.42	664.49
MW-11	Shallow	667.23	not con	nstructed	1.51	665.72	1.96	665.27	2.36	664.87	1.77	665.46
MW-12	Shallow	670.05	not con	nstructed	4.08	665.97	4.35	665.70	4.48	665.57	4.22	665.83
MW-13	Shallow	664.03	not con	nstructed	5.61	658.42	5.70	658.33	6.04	657.99	5.66	658.37
PZ-12	Shallow	666.95	not con	nstructed	2.52	664.43	2.87	664.08	3.70	663.25	2.49	664.46
PZ-13	Shallow	657.20	not con	nstructed	0.98	656.22	1.01	656.19	1.03	656.17	0.98	656.22
PZ-14	Shallow	660.69	not con	nstructed	not co	nstructed	2.13	658.56	2.66	658.03	2.12	658.57
PZ-15	Shallow	662.52	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	1.68	660.84
PZ-16	Shallow	649.51	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	2.14	647.37
PZ-17	Shallow	666.68	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	3.11	663.57
PZ-18	Shallow	654.21	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	3.01	651.20
PZ-19	Shallow	652.74	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	3.88	648.86
PZ-20	Shallow	647.18	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	2.62	644.56
PZ-21	Shallow	645.06	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	2.58	642.48
PZ-101	Shallow	685.87	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	3.01	682.86
PZ-102	Shallow	680.78	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	3.20	677.58
PZ-103	Shallow	not measured (4)	not con	nstructed	not co	nstructed	not co	nstructed	not constructed		2.35	not available (4)
PZ-104	Shallow	666.63	not con	nstructed	not co	nstructed	not co	nstructed	not constructed		3.13	663.50
PZ-105	Shallow	660.27	not con	nstructed	not co	nstructed	not co	nstructed	not co.	nstructed	2.31	657.96
PZ-106	Shallow	650.85	not con	nstructed	not co	nstructed	not co	nstructed	not co.	nstructed	2.31	648.54
PZ-107	Shallow	644.07	not con	nstructed	not co	nstructed	not co	nstructed	not co	nstructed	1.45	642.62

¹⁾ Surveyed by Guntlow & Associates, Inc.; Weston Solutions, Inc.; and The Johnson Company, Inc.

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²⁾ Not measured due to suspected potential for presence of non-aqueous phase liquid (NAPL).

³⁾ Elevation not available due to change in top-of casing elevation between time of measurement and time of survey.

⁴⁾ Elevation not available; location destroyed prior to survey.

Location	Description	Depth to Water in Piezometer (feet)	Depth to Water outside Piezometer (feet)	Inferred Vertical Groundwater Flow Direction
PZ-12	Unnamed stream west of 222 Bowen Road	2.49	2.72	^
PZ-13	East end of Duck Pond	0.98	1.74	^
PZ-14	Park Street road ditch	2.12	2.82	^
PZ-15	Apparent groundwater discharge area east of beaver pond adjacent to 78 Bowen Road parking lot	1.68	2.08	^
PZ-16	Southern edge of pond between Park Street and 78 Bowen Road	2.14	2.64	^
PZ-17	Apparent groundwater discharge area north of Bowen Road, between Plasan facilities	3.11	3.32	^
PZ-18	Apparent groundwater discharge area near eastern edge of wetland area	3.01	2.82	V
PZ-19	Within flowing water, in wetland area	3.88	2.85	V
PZ-20	Apparent groundwater discharge area in wetlands	2.62	2.88	^
PZ-21	Within stream, at edge of wetland area	2.58	2.89	^
PZ-101	North side of Roaring Branch, replacement of PZ-01	3.01	2.63	Ψ
PZ-102	North side of Roaring Branch, replacement of PZ-02	3.20	2.60	V
PZ-103	North side of Roaring Branch, replacement of PZ-03	2.35	2.15	V
PZ-104	North side of Roaring Branch, replacement of PZ-04	3.13	2.75	Ψ
PZ-105	North side of Roaring Branch at Park Street Bridge, replacement of PZ-05	2.31	2.12	V
PZ-106	South side of Roaring Branch, replacement of PZ-06	2.31	2.30	Ψ
PZ-107	North side of Roaring Branch, most downstream location	1.45	1.55	^

Notes:

↑ Indicates discharge of groundwater to surface water.

Indicates recharge of groundwater by surface water.

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Well	VGES		EPA-3		EPA-4	EPA-6	EPA-7	EPA-8
Date	μg/L	8/31/2010	4/19/2012	10/20/2012	8/31/2010	8/31/2010	8/31/2010	8/31/2010
Aroclor 1016	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor 1221	0.5	< 0.5	< 0.3	0.105	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor 1232	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor 1242	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor 1248	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor 1254	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5
Aroclor 1260	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5	< 0.5

Well	VGES	EPA-10	EPA-100	EPA-101	EPA-102	EPA-103	EPA-104S	EPA-104D
Date	μg/L	9/1/2010	10/20/2012	10/19/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012
Aroclor 1016	0.5	0.7 J-	< 0.05	< 0.051	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1221	0.5	< 0.5	0.0819	< 0.051	< 0.05	< 0.05	< 0.05	0.380
Aroclor 1232	0.5	< 0.5	< 0.05	< 0.051	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1242	0.5	< 0.5	0.0585	< 0.051	< 0.05	< 0.05	0.292	0.554
Aroclor 1248	0.5	< 0.5	< 0.05	< 0.051	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1254	0.5	< 0.5	< 0.05	< 0.051	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1260	0.5	< 0.5	< 0.05	< 0.051	< 0.05	< 0.05	< 0.05	< 0.05

- 1) Concentrations reported in parts per billion ($\mu g/L$) unless otherwise noted.
- 2) PCB analysis performed by EPA Method 8082.
- 3) Detected concentrations are shown in bold.
- 4) J- = Laboratory report indicates that concentration may be underestimated.

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Well	VGES	EPA-105	EPA-106S	EPA-106D	EPA-107	EPA-108S	EPA-108D
Date	μg/L	10/18/2012	10/17/2012	10/18/2012	10/18/2012	10/18/2012	10/18/2012
Aroclor 1016	0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1221	0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1232	0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1242	0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1248	0.5	< 0.05	0.305	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1254	0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1260	0.5	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

Well	VGES	VGES MW-1 MW-2					
Date	μg/L	9/1/2010	4/19/2012	10/20/2012	9/1/2010	4/19/2012	10/21/2012
Aroclor 1016	0.5	0.7 J-	< 0.3	< 0.3	< 0.5	< 0.3	< 0.05
Aroclor 1221	0.5	< 0.5	< 0.3	< 0.3	< 0.5	< 0.3	< 0.05
Aroclor 1232	0.5	< 0.5	< 0.3	< 0.3	< 0.5	< 0.3	< 0.05
Aroclor 1242	0.5	< 0.5	< 0.3	< 0.3	< 0.5	< 0.3	< 0.05
Aroclor 1248	0.5	< 0.5	< 0.3	1.54	< 0.5	< 0.3	< 0.05
Aroclor 1254	0.5	< 0.5	< 0.3	< 0.3	< 0.5	< 0.3	< 0.05
Aroclor 1260	0.5	< 0.5	< 0.3	< 0.3	< 0.5	< 0.3	< 0.05

¹⁾ Concentrations reported in parts per billion ($\mu g/L$) unless otherwise noted.

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²⁾ PCB analysis performed by EPA Method 8082.

³⁾ Detected concentrations are shown in bold.

⁴⁾ J- = Laboratory report indicates that concentration may be underestimated.

Well	VGES	MW-3 (Groundwater)			W-3 , μg/kg)	MW-3D			
Date	μg/L	9/2/2010	10/21/2012	4/19/2012	10/21/2012	9/2/2010	Duplicate 9/2/2010	4/19/2012	
Aroclor 1016	0.5	< 1,000	< 18,900	< 20,000	< 5,000	< 10	< 10	< 0.3	
Aroclor 1221	0.5	< 1,000	191,000	< 20,000	186,000,000	< 10	< 10	< 0.3	
Aroclor 1232	0.5	14,000	< 18,900	370,000,000	< 5,000	110	100	280	
Aroclor 1242	0.5	< 1,000	173,000	< 20,000	163,000,000	< 10	< 10	< 0.3	
Aroclor 1248	0.5	< 1,000	< 18,900	< 20,000	< 5,000	< 10	< 10	< 0.3	
Aroclor 1254	0.5	< 1,000	< 18,900	< 20,000	< 5,000	< 10	< 10	< 0.3	
Aroclor 1260	0.5	< 1,000	< 18,900	< 20,000	< 5,000	< 10	< 10	< 0.3	

Well	VGES		MW-3D			MW-4	
Date	μg/L	Duplicate 4/19/2012	10/21/2012	Duplicate 10/21/12	9/1/2010	4/19/2012	10/21/2012
Aroclor 1016	0.5	< 0.3	< 20.0	< 20.0	< 0.5	< 0.3	< 0.05
Aroclor 1221	0.5	< 0.3	216	214	< 0.5	< 0.3	< 0.05
Aroclor 1232	0.5	310	< 20.0	< 20.0	< 0.5	< 0.3	< 0.05
Aroclor 1242	0.5	< 0.3	118	107	< 0.5	< 0.3	< 0.05
Aroclor 1248	0.5	< 0.3	< 20.0	< 20.0	< 0.5	< 0.3	< 0.05
Aroclor 1254	0.5	< 0.3	< 20.0	< 20.0	< 0.5	< 0.3	< 0.05
Aroclor 1260	0.5	< 0.3	< 20.0	< 20.0	< 0.5	< 0.3	< 0.05

¹⁾ Concentrations reported in parts per billion ($\mu g/L$) unless otherwise noted.

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²⁾ PCB analysis performed by EPA Method 8082.

³⁾ Detected concentrations are shown in bold.

⁴⁾ J- = Laboratory report indicates that concentration may be underestimated.

Well	VGES		MW-4D		MW-6			
Date	μg/L	9/2/2010	4/19/2012	10/21/2012	9/1/2010	Duplicate 9/1/2010	4/19/2012	
Aroclor 1016	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.3	
Aroclor 1221	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.3	
Aroclor 1232	0.5	< 0.5	< 0.3	< 0.05	12	11	43	
Aroclor 1242	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.3	
Aroclor 1248	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.3	
Aroclor 1254	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.3	
Aroclor 1260	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.3	

Well	VGES	MV	V-6		MW-6D			
Date	μg/L	Duplicate 4/19/2012	10/21/2012	9/1/2010	4/19/2012	10/21/2012	8/31/2010	
Aroclor 1016	0.5	< 0.3	< 5.00	< 0.5	5.1 J-	< 1.50	< 0.5	
Aroclor 1221	0.5	< 0.3	60.2	< 0.5	< 0.3	< 1.50	< 0.5	
Aroclor 1232	0.5	43	< 5.00	25	< 0.3	< 1.50	< 0.5	
Aroclor 1242	0.5	< 0.3	26.3	< 0.5	< 0.3	14	< 0.5	
Aroclor 1248	0.5	< 0.3	< 5.00	< 0.5	< 0.3	< 1.50	< 0.5	
Aroclor 1254	0.5	< 0.3	< 5.00	< 0.5	< 0.3	< 1.50	< 0.5	
Aroclor 1260	0.5	< 0.3	< 5.00	< 0.5	< 0.3	< 1.50	< 0.5	

- 1) Concentrations reported in parts per billion ($\mu g/L$) unless otherwise noted.
- 2) PCB analysis performed by EPA Method 8082.
- 3) Detected concentrations are shown in bold.
- 4) J- = Laboratory report indicates that concentration may be underestimated.

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Well	VGES		MW-8			MW-9									
Date	μg/L	9/1/2010	4/18/2012	10/19/2012	9/1/2010	4/18/2012	10/19/2012	Duplicate 10/19/12							
Aroclor 1016	0.5	2.3	< 0.3*	< 0.2	5.9 J-	0.8 J-	< 0.2	< 0.2							
Aroclor 1221	0.5	< 0.5	< 0.3	< 0.2	< 0.5	< 0.3	< 0.2	< 0.2							
Aroclor 1232	0.5	< 0.5	< 0.3	< 0.2	< 0.5	< 0.3	< 0.2	< 0.2							
Aroclor 1242	0.5	< 0.5	< 0.3	1.94	< 0.5	< 0.3	< 0.2	< 0.2							
Aroclor 1248	0.5	< 0.5	< 0.3	< 0.2	< 0.5	< 0.3	1.90	1.97							
Aroclor 1254	0.5	< 0.5	< 0.3	< 0.2	< 0.5	< 0.3	< 0.2	< 0.2							
Aroclor 1260	0.5	< 0.5	< 0.3	< 0.2	< 0.5	< 0.3	< 0.2	< 0.2							

Well	VGES		MW-9D			MW-10	
Date	μg/L	9/1/2010	4/19/2012	10/19/2012	8/30/2010	4/18/2012	10/19/2012
Aroclor 1016	0.5	< 1	11	< 1.50	1.6	0.5 J-	< 0.05
Aroclor 1221	0.5	< 1	< 0.3	11.6	< 0.5	< 0.3	< 0.05
Aroclor 1232	0.5	7	< 0.3	< 1.50	< 0.5	< 0.3	< 0.05
Aroclor 1242	0.5	< 1	< 0.3	12.4	< 0.5	< 0.3	0.243
Aroclor 1248	0.5	< 1	< 0.3	< 1.50	< 0.5	< 0.3	< 0.05
Aroclor 1254	0.5	< 1	< 0.3	< 1.50	< 0.5	< 0.3	< 0.05
Aroclor 1260	0.5	< 1	< 0.3	< 1.50	< 0.5	< 0.3	< 0.05

- 1) Concentrations reported in parts per billion (µg/L) unless otherwise noted.
- 2) PCB analysis performed by EPA Method 8082.
- 3) Detected concentrations are shown in bold.
- 4) J- = Laboratory report indicates that concentration may be underestimated.

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^{*} = Laboratory report indicates presence of Aroclor 1016 below reporting limit.

Well	VGES		MW-11		MW-12								
Date	μg/L	8/30/2010	4/18/2012	10/19/2012	8/30/2010	4/19/2012	10/21/2012						
Aroclor 1016	0.5	< 0.5	< 0.3	< 0.05	40	8	< 3.00						
Aroclor 1221	0.5	< 0.5	< 0.3	< 0.05	< 5	< 0.3	30.8						
Aroclor 1232	0.5	< 0.5	< 0.3	< 0.05	< 5	< 0.3	< 3.00						
Aroclor 1242	0.5	< 0.5	< 0.3	< 0.05	< 5	< 0.3	19.5						
Aroclor 1248	0.5	< 0.5	< 0.3	0.176	< 5	< 0.3	< 3.00						
Aroclor 1254	0.5	< 0.5	< 0.3	< 0.05	< 5	< 0.3	< 3.00						
Aroclor 1260	0.5	< 0.5	< 0.3	< 0.05	< 5	< 0.3	< 3.00						

Well	VGES		MW-13		PZ-04	PZ-05	PZ-06
Date	μg/L	8/30/2010	4/18/2012	10/19/2012	8/31/2010	8/31/2010	8/31/2010
Aroclor 1016	0.5	< 0.5	< 0.3*	< 0.05	< 0.5	< 0.5	< 0.5
Aroclor 1221	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5
Aroclor 1232	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5
Aroclor 1242	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5
Aroclor 1248	0.5	< 0.5	< 0.3	0.470	< 0.5	< 0.5	< 0.5
Aroclor 1254	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5
Aroclor 1260	0.5	< 0.5	< 0.3	< 0.05	< 0.5	< 0.5	< 0.5

- 1) Concentrations reported in parts per billion (µg/L) unless otherwise noted.
- 2) PCB analysis performed by EPA Method 8082.
- 3) Detected concentrations are shown in bold.
- 4) J- = Laboratory report indicates that concentration may be underestimated.

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^{* =} Laboratory report indicates presence of Aroclor 1016 below reporting limit.

Well	VGES		PZ-12		PZ-13									
Date	μg/L	4/19/2012	Duplicate 4/19/2012	10/20/2012	8/30/2010	4/18/2012	10/20/2012	Duplicate 10/20/12						
Aroclor 1016	0.5	< 0.3	< 0.3	< 0.05	< 0.5	0.4 J-	< 0.1	< 0.1						
Aroclor 1221	0.5	< 0.3	< 0.3	< 0.05	< 0.5	< 0.3	< 0.1	< 0.1						
Aroclor 1232	0.5	< 0.3	< 0.3	< 0.05	< 0.5	< 0.3	< 0.1	< 0.1						
Aroclor 1242	0.5	< 0.3	< 0.3	< 0.05	< 0.5	< 0.3	< 0.1	< 0.1						
Aroclor 1248	0.5	< 0.3	< 0.3	< 0.05	< 0.5	< 0.3	0.475	0.472						
Aroclor 1254	0.5	< 0.3	< 0.3	< 0.05	< 0.5	< 0.3	< 0.1	< 0.1						
Aroclor 1260	0.5	< 0.3	< 0.3	< 0.05	< 0.5	< 0.3	< 0.1	< 0.1						

Well	VGES		PZ-14		PZ-15	PZ-16	PZ-17	PZ-20
Date	μg/L	8/30/2010	4/18/2012	10/20/2012	10/20/2012	10/20/2012	10/20/2012	10/19/2012
Aroclor 1016	0.5	0.7 J-	0.6 J-	< 0.3	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1221	0.5	< 0.5	< 0.3	< 0.3	0.0538	0.0742	0.0715	< 0.05
Aroclor 1232	0.5	< 0.5	< 0.3	< 0.3	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1242	0.5	< 0.5	< 0.3	< 0.3	< 0.05	< 0.05	< 0.05	0.397
Aroclor 1248	0.5	< 0.5	< 0.3	1.27	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1254	0.5	< 0.5	< 0.3	< 0.3	< 0.05	< 0.05	< 0.05	< 0.05
Aroclor 1260	0.5	< 0.5	< 0.3	< 0.3	< 0.05	< 0.05	< 0.05	< 0.05

- 1) Concentrations reported in parts per billion ($\mu g/L$) unless otherwise noted.
- 2) PCB analysis performed by EPA Method 8082.
- 3) Detected concentrations are shown in bold.
- 4) J- = Laboratory report indicates that concentration may be underestimated.

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Well	VGES	PZ-21
Date	μg/L	10/20/2012
Aroclor 1016	0.5	< 0.1
Aroclor 1221	0.5	< 0.1
Aroclor 1232	0.5	< 0.1
Aroclor 1242	0.5	0.374
Aroclor 1248	0.5	< 0.1
Aroclor 1254	0.5	< 0.1
Aroclor 1260	0.5	< 0.1

1) Concentrations reported in parts per billion ($\mu g/L$) unless otherwise noted.

- 2) PCB analysis performed by EPA Method 8082.
- 3) Detected concentrations are shown in bold.
- 4) J- = Laboratory report indicates that concentration may be underestimated.

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Well	EPA-104S	EPA-105	EPA-106S	MW-9	MW-9D	MW-12	PZ-21
Date	10/18/2012	10/18/2012	10/17/2012	10/19/2012	10/19/2012	10/21/2012	10/20/2012
Aroclors by EPA Meth	od 8082 (µg/L)						
Aroclor 1016	< 0.05	< 0.05	< 0.05	< 0.2	< 1.50	< 3.00	< 0.1
Aroclor 1221	< 0.05	< 0.05	< 0.05	< 0.2	11.6	30.8	< 0.1
Aroclor 1232	< 0.05	< 0.05	< 0.05	< 0.2	< 1.50	< 3.00	< 0.1
Aroclor 1242	0.292	< 0.05	< 0.05	< 0.2	12.4	19.5	0.374
Aroclor 1248	< 0.05	< 0.05	0.305	1.90	< 1.50	< 3.00	< 0.1
Aroclor 1254	< 0.05	< 0.05	< 0.05	< 0.2	< 1.50	< 3.00	< 0.1
Aroclor 1260	< 0.05	< 0.05	< 0.05	< 0.2	< 1.50	< 3.00	< 0.1
Total PCBs	0.292	ND	0.305	1.90	24.0	50.3	0.374
Homologs by EPA Me	thod 680 (µg/L)						
Monochlorobiphenyl	< 0.00470	< 0.00470	< 0.00470	< 0.00470	0.499	< 0.00470	< 0.00470
Dichlorobiphenyl	< 0.00870	< 0.00870	< 0.00870	0.0713	3.74	9.13	< 0.00870
Trichlorobiphenyl	< 0.00630	< 0.00630	< 0.00630	0.569	4.85	6.93	0.0932
Tetrachlorobiphenyl	< 0.0116	< 0.0116	< 0.0116	1.32	1.84	2.03	0.184
Pentachlorobiphenyl	< 0.0137	< 0.0137	< 0.0137	< 0.0137	< 0.0137	< 0.0137	< 0.0137
Hexachlorobiphenyl	< 0.0152	< 0.0152	< 0.0152	< 0.0152	< 0.0152	< 0.0152	< 0.0152
Heptachlorobiphenyl	< 0.0207	< 0.0207	< 0.0207	< 0.0207	< 0.0207	< 0.0207	< 0.0207
Octachlorobiphenyl	< 0.0110	< 0.0110	< 0.0110	< 0.0110	< 0.0110	< 0.0110	< 0.0110
Nonachlorobiphenyl	< 0.0181	< 0.0181	< 0.0181	< 0.0181	< 0.0181	< 0.0181	< 0.0181
Decachlorobiphenyl	< 0.0181	< 0.0181	< 0.0181	< 0.0181	< 0.0181	< 0.0181	< 0.0181
Total PCBs	ND	ND	ND	1.96	10.9	18.1	0.278

¹⁾ Concentrations reported in parts per billion (µg/L) unless otherwise noted.

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²⁾ PCB analysis performed by EPA Methods 8082 and 680 at Pace Analytical in Schenectady, New York.

³⁾ Detected concentrations are shown in bold.

FIGURES

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Surface Water Features

Arrows adjacent to piezometer locations indicate vertical

gradient direction between groundwater and surface water.

Piezometer Location

Contour (2-foot)

Shallow Potentiometric

HRS Reference #68

Parcel boundaries from Vermont Center for Geographic Information.

Aerial photography from ArcGIS Online Bing basemap service.

Date: 12/05/12

Montpelier, VT 05602

Reviewed by: J-B Date: 12/20/12

Scale: 1" = 200' Project: 3-2218-5

Drawn by: DPB

Johnson



Surface Water Features

Piezometer Location

Deep Potentiometric Contour (2-foot)

Parcel boundaries from Vermont Center for Geographic Information.

Aerial photography from ArcGIS Online Bing basemap service.

Date: 12/05/12

Montpelier, VT 05602

Reviewed by: J-B Date: 12/20/12

Scale: 1" = 200' Project: 3-2218-5

Drawn by: DPB

Johnson



Surface Water Features

Shallow Potentiometric

Contour (2-foot)

Piezometer PZ-103 destroyed before survey. Location is

approximate.

NS = Not sampled ND = PCBs not detected

Parcel boundaries from Vermont Center for Geographic Information.

Aerial photography from ArcGIS Online Bing basemap service.

Reviewed by: J-B Date: 12/20/12

Scale: 1" = 200' Project: 3-2218-5

Date: 12/05/12

Drawn by: DPB

Johnson



Surface Water Features

NS = Not sampled

ND = PCBs not detected

Piezometer Location

Deep Potentiometric

Contour (2-foot)

Parcel boundaries from Vermont Center for Geographic Information.

Aerial photography from ArcGIS Online Bing basemap service.

Reviewed by: J-B Date: 12/20/12

Scale: 1" = 200' Project: 3-2218-5

Date: 12/05/12

Drawn by: DPB

Johnson

LABORATORY REPORTS

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Pace Analytical e-Report

Report prepared for:

THE JOHNSON COMPANY, INC 100 STATE ST SUITE 600 MONTPELIER, VT 05602 CONTACT: DAN BASTON

Project ID: JARD - BENNINGTON VT Sampling Date(s): October 17, 2012, October 18, 2012, October 19,

2012, October 20, 2012, October 21, 2012

Lab Report ID: 12110349

Client Service Contact: James Wickham (518) 346-4592

Analysis Included: PCBs by GCMS

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is respondible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Jan Pfelger

Dan Pfalzer Laboratory Director



Certifications: NYS (EPA: NY00906, ELAP: 11078), NJ (NY026), CT (PH-0337), MA(M-NY906), VA (1884)

Pace Analytical Services, Inc. | 2190 Technology Drive | Schenectady, NY 12308 Phone: 518.346.4592 | internet: www.pacelabs.com This page intentionally left blank.

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Section 5: Quality Control Samples (Lab)	.21

CASE NARRATIVE

CASE NARRATIVE

This data package (SDG ID: 12110349) consists of 7 water samples received on 10/19/2012 and 10/22/2012. The samples are from Project Name: JARD - BENNINGTON VT.

This sample delivery group consists of the following samples:

Lab Sample ID	Client ID	Collection Date
AP37904	EPA- 106S	10/17/2012 17:36
AP37905	EPA- 105	10/18/2012 15:38
AP37906	EPA- 104S	10/18/2012 10:20
AP37907	MW- 9	10/19/2012 11:06
AP37908	MW- 9D	10/19/2012 13:22
AP37909	PZ-21	10/20/2012 08:20
AP37910	MW-12	10/21/2012 10:58

Sample Delivery and Receipt Conditions

- (1.) All samples were received at the laboratory intact and within holding times.
- (2.) Please see original sample submissions for sample receipt conditions.
- (3.) At the clients request original samples (LAB ID: AP33032, AP33037, AP33039, AP33044, AP33045, AP33183, AP33188 and AP33193) were analyzed by 680 analysis.

EPA 680 Analysis

Analysis for PCBs by GCMS was performed by EPA Method 680. Samples were extracted by Continuous Liquid/Liquid Extraction (EPA - Method 3520C). The following technical and administrative items were noted for the analysis:

(1.) All quality assurance parameters were met for the analysis.

Respectfully submitted,

Danier Derna

James T. Wickham

Client Services Manager

QUALIFIERS

Organic Laboratory Qualifiers Defined

- B Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.
- D Surrogate was diluted out. The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).
- P Indicates relative percent difference (RPD) between primary and secondary GC column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary GC column analysis exceeds 25 %.
- U Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.
- Z Chromatographic interference due to PCB co-elution.
- * Value not within control limits.

Inorganic Laboratory Qualifiers Defined

- B Denotes analyte observed in associated method blank or digestion blank. Analyte concentration should be considered as estimated.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).
- U Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.
- * Value not within control limits.

SAMPLE CHAIN OF CUSTODY



CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

www.pacelabs.com				olds mast be comple	neu accurately.		
Section A Required Client Information:	Section B	Saci	<121103			E-	
Company: The Talance C	Required Project Information:	Invoi	ce Information:			Page:	of Q
Company: The Johnson Company Address: 100 State Street, Suited	COPY TO: Daniel Basto		121103491	3 3 5 5 1 3 1 	7		1589945
Montpelier, UT 05602			pany Name:	· · · · · · · · · · · · · · · ·	REGULATORY A		
Email To: DPBQ JCOMAIL, COM	Purchase Order No.: 2	Addre	ess:		□ NPDES □	GROUND WA	
Phone: Fax: Fax:	Project Name: 3-12/8-5	Pace C				RCRA	
Phone: 1802)229-4(600 Fax: 1802)229-5876 Requested Due Date/TAT:	TARD	Pace P Manage	Project			RCRA	OTHER
Requested Due Date/TAT:	Project Number: 3-2218-5	Pace P			Site Location		
					STATE: _	<u>V I </u>	
Section D Matrix Co	odes 🖨 🙃				Analysis Filtered ((/N)	
MATRIX / Drinking Water	- I o I S I COLLECTE	D	Preservatives	N			
Water Waste Water	WT 8 U COMPOSITE CO	ON O					
Product Soil/Soild	P START EN	OMPOSITE ND/GRAB UP TO S		1211		1111	
SAMPLE ID Oil	OF 88 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	SOLL Soll		72803		Residual Chlorine (Y/N)	
(A-Z, 0-9 / , -) Wipe Air Sample IDs MUST BE UNIQUE Tissue	AD W	LE TEMP AT CC	B			9	
Other	07 10171	TEMP AT		3		Ori	
TEW #	Z Z Z	SON	2 3 3 3 4 5 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6 5 6			5	
E	MATRIX COD SAMPLE TYPE STATE	₩ 4 g	HNO ₃ HCI HNO ₃ HCI NaOH Na ₂ S ₂ O ₃ Methanol Other	8		dual	
1 EPA-1065	DATE TIME DATE		HNO3 HNO3 HCI NAOH Na ₂ S ₂ O ₃ Methanol Other	8		Sesi	Daniel Daniel Control
2 EPA- 108 D		121736 21		X	-1-1-1-1-	 	Pace Project No./ Lab I.D.
3 EPA-108S	1, / / / / / / /	1181800		X	1111	┞╶╂╌╂ ╌	AP33032/AP37904
4 EPA-107	101101	12 0848 13 2 1		X	 	- - - 	AP33033
5 EPA - 106D	1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	21731 132 V		X	++++		AP33034
6 EPA-1005 EPA-105	WT 6 10 KB			X	++++	┝┼┼┼	AP33035
7 EPA-104D	10181	D 1538 13 2 V			 		AP33036
8 EPA-1045		210271521		X	╂╂┼┼┤		AP33037 AP37905
9 EPA-103	NIG 10181			X	╅┼┼┼┼┤		AP33038
10 EPA-102	WIG 10/8/K			8)	┼╎ ┼┼┼		AP33039/AP3790A
11 PZ-20	MG DIKIT	2122713 2 V		8	╁╂╃╂╁┪		AP33040
12	WT 6 10/18/1	21420 15 2/		\ 	╂╁┼┼┼		AP33041
ADDITIONAL COMMENTS			 		++++++++++++++++++++++++++++++++++++		AP33042
	RELINQUISHED BY AFFILIATION	DATE TIME	ACCEPTED BY /	AFFILIATION		##1_	
Retain samples for homolog	Kul Mar	19/9/ 14U			DATE TIME		SAMPLE CONDITIONS
analysis. Ico to determine					10-19-12 144	0.5	NNV
Sample Cohamband		16-19-12 16 15	andili Co	nolus 1	1019121615	N 7	
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results extract and hold ORIGHT Notice By signing this form you are all all and the company of						1.0	Y N Y
resulb	SAMPLER NAME AN	ND SIGNATURE					
extract and hold orig			100			ပု န	da de
ter Method (080 samples)	SIGNATURE	E of SAMPLER:	1. Bastan	DATE CI		Temp in °C	Custody Sealed Cooler (Y/N) (Y/N) (Y/N)
"Important Note: By signing this form you are accepting Pac	e's NET 30 day payment terms and arreging to late charges	of 1 50% nor market	(7m)	DATE Signed (MM/DD/YY):	19/12	Reco	Seale C Seale



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

	www.pacelabs.com																_		0010101	,.						
R	Section A Required Client Information:	Section Require	ed Pro	oject In	formation:					ction	n C	ioo:				<u> 1349P2</u> 1111111111						Page:			a	
C	Company: The JUNISA Company Iddress: JOSHUK St, SUI KLEDO MONTPELIEY, VT GSUCE mail To: DPBCJC CMAIL COM bone: JOSHUK SP [Ex:	Report 1	ro:D	ani	e1 1300	ten				ention				21102			I II -	7					1 5	900	A 1	
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Er	mail to: DASEJCOMAILCOM	Purchase	e Ord	er No.:	3-221	18-5				e Quot							·	7					WATER	DR DR	INKING W	/ATER
P	502-229-4600 802-229-5876	Project N	lame:	3	ARD	<u></u>		_	Pace	erence: e Proje						,		-	UST	T.	RC	CRA		l OT	HER	
Re	1000 802-229-58 % equested Due Date TAT:	Project N	lumbe	3	ARD -ZZI	8-5				ager: Profile	le #:							Site	Locat		V	T				
						<u> </u>									P. Carlo				STAT	(A)	$\underline{-}$		-			
	Section D Matrix Co		T					T	Т	\top					╁═	Requ	ested	Analy	sis Fi	Itered	(Y/N) [
	Required Client Information MATRIX / Q Drinking Water		s to le	OMP		COLLECTE	D	1		L	Pre	serva	atives	5	N /	N										
	Water Waste Water	WT WW	a po c	5	COMPOSITE	E CC	MPOSITE	§ N				\prod	T	\prod					11	-	\vdash					
	Product Soil/Solid	P SL	(see valid codes to left)	(G=GRAB C=COMP)	START		ID/GRAB	COLLECTION	1							2								ontach f Ef equin r prop high	7 30	$\langle \circ \blacksquare$
	SAMPLE ID OIL	OL WP	See	(G=G				ğ	83						-	808							Kesidual Chlorine (Y/N)	r Ex	4-10	i ic. V
	(A-Z, 0-9 / ,-) Air Sample IDs MUST BE UNIQUE Tissue	AR TS	CODE	1 1				PAT	CONTAINERS						Analysis Test	00						11.	E (equin	s H	INATE
**	Other	OT	۵ ک	TYPE			-	TEM	Š	Sec	. .	1		_	Sis	व	11			11			g to	Sord	ver an	را کا کا کا
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3	WM-dD		W			(C/A)	2 1322	5	2	U	11	\top	+	+	ŀ	χ	┼┼	+	\vdash	+ +	+	+	┼ ┈	AP33	044/A	P 3790
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						SIGNATUR	E of SAMPLER	₹: 🖊	1	1	1/	ln			DA	TE Signed	1 10	110	11	<u> </u>	\neg	Ten	95 5e	3 8	d d	-

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month of any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007 Page 33 of 163
Page 10 of 27



CHAIN-OF-CUSTODY / Analytical Request Document

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www.pacelabs.com			Section C			Page:	2 of	3							
Section A Required Client Information:	Section B Required Project Information:		Invoice Information:	12	1103493	1589944									
The Johnson Company		baston	Attention:												
Address State Street, Suite 600	Сору То:		Company Name:		REGULATORY AGENCY										
Montpelier, VT 05602			Address:		NPDES GROUND WATER DRINKING WATER										
Email To: DPBC SCOMAIL-COM		18-5	Pace Quote Reference:		C UST I	RCRA	OTHER								
[Bo1)229-4600 [BO1)229-5876	Project Name: JAR	20	Pace Project Manager:		Site Location	VT									
Requested Due Date/TAT:	Project Number: 3-27	218-5	Pace Profile #:		STATE:										
					Analysis Filtere	d (Y/N)									
Section D Matrix	Codes & a	COLLECTED	Preservatives	Z X											
Required Client Information MATRIX Drinking Wa	1 2 10							<u> </u>							
Water Waste Waste Waste Water	r WW D COMPOS			7			2								
Product Soil/Solid	SL I R I O I	OLE	S	→ ∞			Residual Chlorine (Y/N) ace bace								
SAMPLE ID Oil Wipe		 	9	Test Z			un o								
(A-Z, 0-9 / ,-) Air Sample IDs MUST BE UNIQUE Tissue	AR GO	TEMP	New Att	1.0			5								
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	Z W DATE	IONON 1837 12					AP3317	4							
1 EPA-3 2 EPA-100		10/20/20746 15					AP33175	5							
3 MW-1		10/20/2 1732 16	 	X			AP33176	5							
4 PZ-12		10/20/2 (6/6/6	av				AP33177								
5 PZ-13		10/20/14/259 17	av				AP 33178								
6 PZ-14		10/20/12/1452 16				+++	PP33179	/							
7 PZ-15		10/20/12 1122 12	9 \				Ap33189	<i>,</i>							
8 PZ-16		10/10/12/0937 15					18181 10000100								
9 PZ-17		10/20/2 1725 18		X		+++	AP3382	1AP37909							
10 PZ-21		10/20/12/08/20 13				1-1-1-	19733184								
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12	DEL MONTRUED DV	AFFILIATION DATE	TIME ACCEPTE	D BY / AFFILIATION	DATE	TIME	SAMPLE C	ONDITIONS							
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O	RIGINAL	PRINT Name of SAMPLER	Daniel Bast	ton			Received on Ice (Y/N) Custody	Search Cooler (Y/N) Samples Intact (Y/N)							
	Γ	DATE Signed	10/2/11/7	_	- 22 - 2	Sar									



CHAIN-OF-CUSTODY / Analytical Request Document The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed 372110349P4>

	www.pacelabs.com																					a nna i 1 0						
	oction A equired Client Information:	Section B Required Project Information:						Section C Invoice Information:										110349			ye: 3 of 3							
Co	Control Johnson Company Report To: Daniel Baston						Att	Attention:												1589942								
Address: State Street Suite Copy To:						Co	Company Name:								R	EGUL.	ATOR	Y AGEN	ICY									
Montpelier, ut osless						Ad	Address									DES GROUND WATER DRINKING WATER												
Email To: DPBQ JCOMAIL COM Purchase Order No.: 3-2218-5						Pace Quote Reference:								-	UST F RCRA TOTHER													
P	802)229-4600 [8802)229-4600	Project Name: 3-2218-5					Pace Project									s	ite Lo	cation										
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300.6																	Re	quest	led An	alysis	Filte	red (Y/N)						
	Section D Matrix C Required Client Information MATRIX /	CODE	to left)	C=COMP)		COLL	ECTED					Pre	eserv	ative:	s	TN X	N											
	Drinking Wate Water Waste Water Product				COMP(STAI	APOSITE COMPOSITE ENDIGRAB									Š							(Z						
	SAMPLE ID Soi/Soid Oil Wipe (A-Z, 0-9 / ,-) Air	SL OL WP AR	E (see	. (G≃GRAB					ATCO	INERS						Test	3							Chiorine (Y/N)				
ITEM#	Sample IDs MUST BE UNIQUE Tissue Other	TS OT	MATRIX CODE	SAMPLE TYPE					SAMPLE TEMP	# OF CONTAINERS	npreserved	H2SO4	ō	NaOH Na ₂ S ₂ O ₃	Methanol	0	PCB5						-	Kesiduai Chi				
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7	MW-DZ		WT					1400		2	-1/	\top		\top			X	11			11	-11			331	91		
8	Mw-3D		W	6			10/21/12	1426	16		V						X				11				33	92		
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F-ALL-Q-020rev.07, 15-May-2007

GC/MS - 680



Job Number: 12110349

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 106S

Lab Sample ID: 12110349-01 (AP37904)

Collection Date: 10/17/2012 17:36

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: MS03-356-6	PCB by EPA Method 680 GCMS	11/27/2012 16:53	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20919	EPA 3520C	10/23/2012 08:15	OCD	1000 mL	5.00 mL	NA
Analyte	CAS No.	Result (ug/L)	MDL	Dilution Fact	or Flags	File ID
Monochlorobiphenyl	27323-18-8	ND	0.00470	1.00	U	MS03-356-6
Dichlorobiphenyl	25512-42-9	ND	0.00870	1.00	U	MS03-356-6
Trichlorobiphenyl	25323-68-6	ND	0.00630	1.00	U	MS03-356-6
Tetrachlorobiphenyl	26914-33-0	ND	0.0116	1.00	U	MS03-356-6
Pentachlorobiphenyl	25429-29-2	ND	0.0137	1.00	U	MS03-356-6
Hexachlorobiphenyl	26601-64-9	ND	0.0152	1.00	U	MS03-356-6
Heptachlorobiphenyl	28655-71-2	ND	0.0207	1.00	U	MS03-356-6
Octachlorobiphenyl	55722-26-4	ND	0.0110	1.00	U	MS03-356-6
Nonachlorobiphenyl	53742-07-7	ND	0.0181	1.00	U	MS03-356-6
Decachlorobiphenyl	2051-24-3	ND	0.0181	1.00	U	MS03-356-6
Total PCB	1336-36-3	ND		1.00	U	MS03-356-6
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Decachloro[13C12]bipheny	1 105600-27-9	116	60.0	-140		MS03-356-6
Tetrachloro-meta-xylene	877-09-8	87.1	60.0	-140		MS03-356-6

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Job Number: 12110349

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 105

Lab Sample ID: 12110349-02 (AP37905)

Collection Date: 10/18/2012 15:38

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: MS03-357-10	PCB by EPA Method 680 GCMS	11/28/2012 14:45	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20919	EPA 3520C	10/23/2012 08:15	OCD	1080 mL	5.00 mL	NA
Analyte	CAS No.	Result (ug/L)	MDL	Dilution Fact	or Flags	File ID
Monochlorobiphenyl	27323-18-8	ND	0.00470	1.00	U	MS03-357-10
Dichlorobiphenyl	25512-42-9	ND	0.00870	1.00	U	MS03-357-10
Trichlorobiphenyl	25323-68-6	ND	0.00630	1.00	U	MS03-357-10
Tetrachlorobiphenyl	26914-33-0	ND	0.0116	1.00	U	MS03-357-10
Pentachlorobiphenyl	25429-29-2	ND	0.0137	1.00	U	MS03-357-10
Hexachlorobiphenyl	26601-64-9	ND	0.0152	1.00	U	MS03-357-10
Heptachlorobiphenyl	28655-71-2	ND	0.0207	1.00	U	MS03-357-10
Octachlorobiphenyl	55722-26-4	ND	0.0110	1.00	U	MS03-357-10
Nonachlorobiphenyl	53742-07-7	ND	0.0181	1.00	U	MS03-357-10
Decachlorobiphenyl	2051-24-3	ND	0.0181	1.00	U	MS03-357-10
Total PCB	1336-36-3	ND		1.00	U	MS03-357-10
			Lin	nits	,	
Surrogate	CAS No.	% Recovery	(%	5)	$\mathbf{Q}^{\scriptscriptstyle 1}$	File ID
Decachloro[13C12]biphe	nyl 105600-27-9	108	60.0	-140		MS03-357-10
Tetrachloro-meta-xylene	877-09-8	77.7	60.0	-140		MS03-357-10

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

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MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Job Number: 12110349

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Collection Date: 10/18/2012 10:20

Project: JARD - BENNINGTON VT Sample Matrix: WATER

Client Sample ID: EPA- 104S Received Date: 10/19/2012 16:15

Lab Sample ID: 12110349-03 (AP37906) **Percent Solid:** N/A

Ва	tch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: MS0	03-356-8	PCB by EPA Method 680 GCMS	11/27/2012 17:43	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 209	19	EPA 3520C	10/23/2012 08:15	OCD	1000 mL	5.00 mL	NA
Analyte		CAS No.	Result (ug/L)	MDL	Dilution Fact	tor Flags	File ID
Monochlorobipher	ıyl	27323-18-8	ND	0.00470	1.00	U	MS03-356-8
Dichlorobiphenyl		25512-42-9	ND	0.00870	1.00	U	MS03-356-8
Trichlorobiphenyl		25323-68-6	ND	0.00630	1.00	U	MS03-356-8
Tetrachlorobiphen	yl	26914-33-0	ND	0.0116	1.00	U	MS03-356-8
Pentachlorobiphen	ıyl	25429-29-2	ND	0.0137	1.00	U	MS03-356-8
Hexachlorobiphen	yl	26601-64-9	ND	0.0152	1.00	U	MS03-356-8
Heptachlorobipher	ıyl	28655-71-2	ND	0.0207	1.00	U	MS03-356-8
Octachlorobipheny	y1	55722-26-4	ND	0.0110	1.00	U	MS03-356-8
Nonachlorobiphen	yl	53742-07-7	ND	0.0181	1.00	U	MS03-356-8
Decachlorobiphen	yl	2051-24-3	ND	0.0181	1.00	U	MS03-356-8
Total PCB	-	1336-36-3	ND		1.00	U	MS03-356-8
				Lin	nits		
Surrogate		CAS No.	% Recovery	(%	b)	\mathbf{Q}^1	File ID
Decachloro[13C12	2]biphen	yl 105600-27-9	112	60.0	-140		MS03-356-8
Tetrachloro-meta-	xylene	877-09-8	82.3	60.0	-140		MS03-356-8

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Job Number: 12110349

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-9

Lab Sample ID: 12110349-04 (AP37907)

Collection Date: 10/19/2012 11:06

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column			
Analysis 1: MS03-356-9	PCB by EPA Method 680 GCMS	11/27/2012 18:32	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm			
Prep 1: 20919	EPA 3520C	10/23/2012 08:15	OCD	1080 mL	5.00 mL	NA			
Analyte	CAS No.	Result (ug/L)	MDL	Dilution Fact	or Flags	File ID			
Monochlorobiphenyl	27323-18-8	ND	0.00470	1.00	U	MS03-356-9			
Dichlorobiphenyl	25512-42-9	0.0713	0.00870	1.00		MS03-356-9			
Trichlorobiphenyl	25323-68-6	0.569	0.00630	1.00		MS03-356-9			
Tetrachlorobiphenyl	26914-33-0	1.32	0.0116	1.00		MS03-356-9			
Pentachlorobiphenyl	25429-29-2	ND	0.0137	1.00	U	MS03-356-9			
Hexachlorobiphenyl	26601-64-9	ND	0.0152	1.00	U	MS03-356-9			
Heptachlorobiphenyl	28655-71-2	ND	0.0207	1.00	U	MS03-356-9			
Octachlorobiphenyl	55722-26-4	ND	0.0110	1.00	U	MS03-356-9			
Nonachlorobiphenyl	53742-07-7	ND	0.0181	1.00	U	MS03-356-9			
Decachlorobiphenyl	2051-24-3	ND	0.0181	1.00	U	MS03-356-9			
Total PCB	1336-36-3	1.96		1.00		MS03-356-9			
	Limits								
Surrogate	CAS No.	% Recovery	(%	b)	\mathbf{Q}^1	File ID			
Decachloro[13C12]biphen	ıyl 105600-27-9	114	60.0	-140		MS03-356-9			
Tetrachloro-meta-xylene	877-09-8	72.3	60.0	-140		MS03-356-9			

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Job Number: 12110349

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-9D

Lab Sample ID: 12110349-05 (AP37908)

Collection Date: 10/19/2012 13:22

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Bat	tch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: MS03	3-357-11	PCB by EPA Method 680 GCMS	11/28/2012 15:34	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 2091	9	EPA 3520C	10/23/2012 08:15	OCD	1080 mL	5.00 mL	NA
Analyte		CAS No.	Result (ug/L)	MDL	Dilution Fac	tor Flags	File ID
Monochlorobiphen	yl	27323-18-8	0.499	0.00470	1.00		MS03-357-11
Dichlorobiphenyl		25512-42-9	3.74	0.00870	1.00		MS03-357-11
Trichlorobiphenyl		25323-68-6	4.85	0.00630	1.00		MS03-357-11
Tetrachlorobipheny	/1	26914-33-0	1.84	0.0116	1.00		MS03-357-11
Pentachlorobipheny	yl	25429-29-2	ND	0.0137	1.00	U	MS03-357-11
Hexachlorobipheny	/1	26601-64-9	ND	0.0152	1.00	U	MS03-357-11
Heptachlorobiphen	yl	28655-71-2	ND	0.0207	1.00	U	MS03-357-11
Octachlorobiphenyl	1	55722-26-4	ND	0.0110	1.00	U	MS03-357-11
Nonachlorobipheny	y1	53742-07-7	ND	0.0181	1.00	U	MS03-357-11
Decachlorobipheny	/1	2051-24-3	ND	0.0181	1.00	U	MS03-357-11
Total PCB		1336-36-3	10.9		1.00		MS03-357-11
				т:	.:4a		
Cumacata		CACNO	0/ Dagayawa	Lin		\mathbf{O}^1	Etle ID
Surrogate		CAS No.	% Recovery	(%	<u> </u>	Q ¹	File ID
Decachloro[13C12			114	60.0			MS03-357-11
Tetrachloro-meta-x	,	877-09-8	81.9	60.0	-140		MS03-357-11

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Job Number: 12110349

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: PZ-21

Lab Sample ID: 12110349-06 (AP37909)

Collection Date: 10/20/2012 08:20

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: MS03-357-8	PCB by EPA Method 680 GCMS	11/28/2012 13:06	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20920	EPA 3520C	10/25/2012 08:15	OCD	1060 mL	5.00 mL	NA
Analyte	CAS No.	Result (ug/L)	MDL	Dilution Fact	or Flags	File ID
Monochlorobiphenyl	27323-18-8	ND	0.00470	1.00	U	MS03-357-8
Dichlorobiphenyl	25512-42-9	ND	0.00870	1.00	U	MS03-357-8
Trichlorobiphenyl	25323-68-6	0.0932	0.00630	1.00		MS03-357-8
Tetrachlorobiphenyl	26914-33-0	0.184	0.0116	1.00		MS03-357-8
Pentachlorobiphenyl	25429-29-2	ND	0.0137	1.00	U	MS03-357-8
Hexachlorobiphenyl	26601-64-9	ND	0.0152	1.00	U	MS03-357-8
Heptachlorobiphenyl	28655-71-2	ND	0.0207	1.00	U	MS03-357-8
Octachlorobiphenyl	55722-26-4	ND	0.0110	1.00	U	MS03-357-8
Nonachlorobiphenyl	53742-07-7	ND	0.0181	1.00	U	MS03-357-8
Decachlorobiphenyl	2051-24-3	ND	0.0181	1.00	U	MS03-357-8
Total PCB	1336-36-3	0.278		1.00		MS03-357-8
			Lim	. : 4s		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Decachloro[13C12]bipheny	1 105600-27-9	106	60.0-	-140	_	MS03-357-8
Tetrachloro-meta-xylene	877-09-8	81.7	60.0-	-140		MS03-357-8

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Job Number: 12110349

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-12

Lab Sample ID: 12110349-07 (AP37910)

Collection Date: 10/21/2012 10:58

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: MS03-357-9	PCB by EPA Method 680 GCMS	11/28/2012 13:55	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20921	EPA 3520C	10/24/2012 08:15	OCD	1080 mL	5.00 mL	NA
Analyte	CAS No.	Result (ug/L)	MDL	Dilution Fact	or Flags	File ID
Monochlorobiphenyl	27323-18-8	ND	0.00470	1.00	U	MS03-357-9
Dichlorobiphenyl	25512-42-9	9.13	0.00870	1.00		MS03-357-9
Trichlorobiphenyl	25323-68-6	6.93	0.00630	1.00		MS03-357-9
Tetrachlorobiphenyl	26914-33-0	2.03	0.0116	1.00		MS03-357-9
Pentachlorobiphenyl	25429-29-2	ND	0.0137	1.00	U	MS03-357-9
Hexachlorobiphenyl	26601-64-9	ND	0.0152	1.00	U	MS03-357-9
Heptachlorobiphenyl	28655-71-2	ND	0.0207	1.00	U	MS03-357-9
Octachlorobiphenyl	55722-26-4	ND	0.0110	1.00	U	MS03-357-9
Nonachlorobiphenyl	53742-07-7	ND	0.0181	1.00	U	MS03-357-9
Decachlorobiphenyl	2051-24-3	ND	0.0181	1.00	U	MS03-357-9
Total PCB	1336-36-3	18.1		1.00		MS03-357-9
			Lim	nits		
Surrogate	CAS No.	% Recovery	(%		\boldsymbol{Q}^{1}	File ID
Decachloro[13C12]biphen	yl 105600-27-9	115	60.0-	-140		MS03-357-9
Tetrachloro-meta-xylene	877-09-8	84.5	60.0-	-140		MS03-357-9

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.

Quality Control Samples (Lab)



Quality Control Results Method Blank

Job Number: 12110349

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC **Project:** JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP37904B)

Lab Sample ID: SBLK-82

В	atch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column		
Analysis 1: MS	S03-356-4	PCB by EPA Method 680 GCMS	11/27/2012 15:14	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm		
Prep 1: 20	919	EPA 3520C	10/23/2012 08:15	OCD	1000 mL	5.00 mL	NA		
Analyte		CAS No.	Result (ug/L)	MDL	Dilution Fact	tor Flags	File ID		
Monochlorobiphe	enyl	27323-18-8	ND	0.00470	1.00	U	MS03-356-4		
Dichlorobiphenyl	[25512-42-9	ND	0.00870	1.00	U	MS03-356-4		
Trichlorobipheny	1	25323-68-6	ND	0.00630	1.00	U	MS03-356-4		
Tetrachlorobipher	nyl	26914-33-0	ND	0.0116	1.00	U	MS03-356-4		
Pentachlorobiphe	nyl	25429-29-2	ND	0.0137	1.00	U	MS03-356-4		
Hexachlorobipher	nyl	26601-64-9	ND	0.0152	1.00	U	MS03-356-4		
Heptachlorobiphe	enyl	28655-71-2	ND	0.0207	1.00	U	MS03-356-4		
Octachlorobiphen	nyl	55722-26-4	ND	0.0110	1.00	U	MS03-356-4		
Nonachlorobiphe	nyl	53742-07-7	ND	0.0181	1.00	U	MS03-356-4		
Decachlorobipher	nyl	2051-24-3	ND	0.0181	1.00	U	MS03-356-4		
Total PCB		1336-36-3	ND		1.00	U	MS03-356-4		
	Limits								
Surrogate		CAS No.	% Recovery	(%	(o)	\mathbf{Q}^1	File ID		
Decachloro[13C]	12]biphen	yl 105600-27-9	106	60.0	-140		MS03-356-4		
Tetrachloro-meta		877-09-8	83.9	60.0	-140		MS03-356-4		

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Quality Control Results Lab Control Sample

Job Number: 12110349

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP37904L)

Lab Sample ID: LCS-82

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS03-356-5	PCB by EPA Method 680 GCMS	11/27/2012 16:04	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20919	EPA 3520C	10/23/2012 08:15	OCD	1000 mL	5.00 mL	NA

		Added	LCS	LCS	1	Limits	
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	$\mathbf{Q}^{^{1}}$	(%)	
Monochlorobiphenyl	27323-18-8	2.50	1.91	76.5		60.0-140	
Dichlorobiphenyl	25512-42-9	2.50	2.18	87.3		60.0-140	
Trichlorobiphenyl	25323-68-6	2.50	2.36	94.4		60.0-140	
Tetrachlorobiphenyl	26914-33-0	5.00	4.86	97.3		60.0-140	
Pentachlorobiphenyl	25429-29-2	5.00	4.81	96.2		60.0-140	
Hexachlorobiphenyl	26601-64-9	5.00	5.10	102		60.0-140	
Heptachlorobiphenyl	28655-71-2	7.50	7.64	102		60.0-140	
Octachlorobiphenyl	55722-26-4	7.50	7.69	103		60.0-140	
Decachlorobiphenyl	2051-24-3	12.5	14.9	119		60.0-140	

¹ Qualifier column where **' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits			
Surrogate	CAS No.	% Recovery	(%)	$\mathbf{Q}^{^{1}}$	File ID	
Decachloro[13C12]biphenyl	105600-27-9	130	60.0-140		MS03-356-5	
Tetrachloro-meta-xylene	877-09-8	86.3	60.0-140		MS03-356-5	

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Quality Control Results Method Blank

Job Number: 12110349

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP37909B)

Lab Sample ID: SBLK-83

Batch 1	D Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: MS03-357	'-4 PCB by EPA Method 680 GCMS	11/28/2012 10:37	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20920	EPA 3520C	10/25/2012 08:15	OCD	1000 mL	5.00 mL	NA
Analyte	CAS No.	Result (ug/L)	MDL	Dilution Fact	or Flags	File ID
Monochlorobiphenyl	27323-18-8	ND	0.00470	1.00	U	MS03-357-4
Dichlorobiphenyl	25512-42-9	ND	0.00870	1.00	U	MS03-357-4
Trichlorobiphenyl	25323-68-6	ND	0.00630	1.00	U	MS03-357-4
Tetrachlorobiphenyl	26914-33-0	ND	0.0116	1.00	U	MS03-357-4
Pentachlorobiphenyl	25429-29-2	ND	0.0137	1.00	U	MS03-357-4
Hexachlorobiphenyl	26601-64-9	ND	0.0152	1.00	U	MS03-357-4
Heptachlorobiphenyl	28655-71-2	ND	0.0207	1.00	U	MS03-357-4
Octachlorobiphenyl	55722-26-4	ND	0.0110	1.00	U	MS03-357-4
Nonachlorobiphenyl	53742-07-7	ND	0.0181	1.00	U	MS03-357-4
Decachlorobiphenyl	2051-24-3	ND	0.0181	1.00	U	MS03-357-4
Total PCB	1336-36-3	ND		1.00	U	MS03-357-4
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	b)	\mathbf{Q}^1	File ID
Decachloro[13C12]bip	henyl 105600-27-9	98.1	60.0	-140		MS03-357-4
Tetrachloro-meta-xylen	e 877-09-8	74.3	60.0	-140		MS03-357-4

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Quality Control Results Lab Control Sample

Job Number: 12110349

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP37909L)

Lab Sample ID: LCS-83

Collection Date: N/A
Sample Matrix: WATER
Received Date: N/A
Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS03-357-6	PCB by EPA Method 680 GCMS	11/28/2012 11:27	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20920	EPA 3520C	10/25/2012 08:15	OCD	1000 mL	5.00 mL	NA

		Added	LCS	LCS	1	Limits	
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	$\mathbf{Q}^{'}$	(%)	
Monochlorobiphenyl	27323-18-8	2.50	1.72	68.9		60.0-140	
Dichlorobiphenyl	25512-42-9	2.50	1.82	72.8		60.0-140	
Trichlorobiphenyl	25323-68-6	2.50	1.96	78.3		60.0-140	
Tetrachlorobiphenyl	26914-33-0	5.00	3.98	79.6		60.0-140	
Pentachlorobiphenyl	25429-29-2	5.00	3.94	78.9		60.0-140	
Hexachlorobiphenyl	26601-64-9	5.00	4.27	85.4		60.0-140	
Heptachlorobiphenyl	28655-71-2	7.50	6.43	85.7		60.0-140	
Octachlorobiphenyl	55722-26-4	7.50	6.38	85.0		60.0-140	
Decachlorobiphenyl	2051-24-3	12.5	12.8	102		60.0-140	

¹ Qualifier column where **' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits			
Surrogate	CAS No.	% Recovery	(%)	$\mathbf{Q}^{\scriptscriptstyle ext{ iny }}$	File ID	
Decachloro[13C12]biphenyl	105600-27-9	100	60.0-140		MS03-357-6	
Tetrachloro-meta-xylene	877-09-8	81.9	60.0-140		MS03-357-6	

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.

ND: Denotes analyte not detected at a concentration greater than the MDL.



Quality Control Results Method Blank

Job Number: 12110349

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC
Project: JARD - BENNINGTON VT
Sample Matrix: WATER
Client Sample ID: Method Blank (AP37910B)
Received Date: N/A
Lab Sample ID: SBLK-84
Percent Solid: N/A

Batch	ID Method		Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: MS03-35	7-12 PCB by EPA Me	thod 680 GCMS	11/28/2012 16:24	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20921	EPA 3520C		10/24/2012 08:15	OCD	1000 mL	5.00 mL	NA
Analyte	CAS	S No. R	esult (ug/L)	MDL	Dilution Fact	tor Flags	File ID
Monochlorobiphenyl	27323-	18-8	ND	0.00470	1.00	U	MS03-357-12
Dichlorobiphenyl	25512-	42-9	ND	0.00870	1.00	U	MS03-357-12
Trichlorobiphenyl	25323-	-68-6	ND	0.00630	1.00	U	MS03-357-12
Tetrachlorobiphenyl	26914-	33-0	ND	0.0116	1.00	U	MS03-357-12
Pentachlorobiphenyl	25429-	29-2	ND	0.0137	1.00	U	MS03-357-12
Hexachlorobiphenyl	26601-	64-9	ND	0.0152	1.00	U	MS03-357-12
Heptachlorobiphenyl	28655-	71-2	ND	0.0207	1.00	U	MS03-357-12
Octachlorobiphenyl	55722-	26-4	ND	0.0110	1.00	U	MS03-357-12
Nonachlorobiphenyl	53742-	07-7	ND	0.0181	1.00	U	MS03-357-12
Decachlorobiphenyl	2051-2	4-3	ND	0.0181	1.00	U	MS03-357-12
Total PCB	1336-3	6-3	ND		1.00	U	MS03-357-12
				Lim	nits		
Surrogate	CAS	S No.	% Recovery	(%)	\mathbf{Q}^1	File ID
Decachloro[13C12]bij	ohenyl 10560	00-27-9	111	60.0-	140		MS03-357-12
Tetrachloro-meta-xyle	ne 877-0	9-8	78.8	60.0-	140		MS03-357-12

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Quality Control Results Lab Control Sample

Job Number: 12110349

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC **Project:** JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP37910L)

Lab Sample ID: LCS-84

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	MS03-357-7	PCB by EPA Method 680 GCMS	11/28/2012 12:17	RMS	NA	NA	Agilent, J&W DB-XLB, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20921	EPA 3520C	10/24/2012 08:15	OCD	1000 mL	5.00 mL	NA

		Added	LCS	LCS	1	Limits	
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	$\mathbf{Q}^{^{1}}$	(%)	
Monochlorobiphenyl	27323-18-8	2.50	1.80	72.0		60.0-140	
Dichlorobiphenyl	25512-42-9	2.50	1.95	78.0		60.0-140	
Trichlorobiphenyl	25323-68-6	2.50	2.08	83.1		60.0-140	
Tetrachlorobiphenyl	26914-33-0	5.00	4.28	85.6		60.0-140	
Pentachlorobiphenyl	25429-29-2	5.00	4.29	85.7		60.0-140	
Hexachlorobiphenyl	26601-64-9	5.00	4.45	88.9		60.0-140	
Heptachlorobiphenyl	28655-71-2	7.50	6.64	88.6		60.0-140	
Octachlorobiphenyl	55722-26-4	7.50	6.78	90.4		60.0-140	
Decachlorobiphenyl	2051-24-3	12.5	13.2	106		60.0-140	

¹ Qualifier column where **' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits			
Surrogate	CAS No.	% Recovery	(%)	$\mathbf{Q}^{^{1}}$	File ID	
Decachloro[13C12]biphenyl	105600-27-9	123	60.0-140		MS03-357-7	
Tetrachloro-meta-xylene	877-09-8	85.1	60.0-140		MS03-357-7	

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the MDL.

MDL (Method Detection Limit). Denotes lowest analyte concentration observable for the sample based on statistical study.



Pace Analytical e-Report

Report prepared for:

THE JOHNSON COMPANY, INC 100 STATE ST SUITE 600 MONTPELIER, VT 05602 CONTACT: DAN BASTON

Project ID: JARD - BENNINGTON VT **Sampling Date(s):** October 21, 2012

Lab Report ID: 12100364

Client Service Contact: James Wickham (518) 346-4592

Analysis Included: PCB Analysis (Water) PCB Analysis (Solid)

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is respondible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Jan Pfelger

Dan Pfalzer Laboratory Director



Certifications: NYS (EPA: NY00906, ELAP: 11078), NJ (NY026), CT (PH-0337), MA(M-NY906), NC (668)

Pace Analytical Services, Inc.| 2190 Technology Drive | Schenectady, NY 12308 Phone: 518.346.4592 | internet: www.pacelabs.com This page intentionally left blank.

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CASE NARRATIVE

CASE NARRATIVE

This data package (SDG ID: 12100364) consists of 9 water samples and 1 oil sample received on 10/22/2012. The samples are from Project Name: JARD - BENNINGTON VT.

This sample delivery group consists of the following samples:

<u>Lab Sample ID</u>	Client ID	Collection Date
AP33185	MW-2	10/21/2012 08:17
AP33186	MW-4	10/21/2012 09:35
AP33187	MW-4D	10/21/2012 09:09
AP33188	MW-12	10/21/2012 10:58
AP33189	MW-6	10/21/2012 13:30
AP33190	MW-6D	10/21/2012 12:41
AP33191	MW-D2	10/21/2012 14:00
AP33192	MW-3D	10/21/2012 14:26
AP33193	MW-3 UPPER PHASE	10/21/2012 15:10
AP33211	MW-3 LOWER PHASE	10/21/2012 15:10

Sample Delivery and Receipt Conditions

- (1.) All samples were delivered to the laboratory via DROP OFF delivery service on 10/22/2012.
- (2.) All samples were received at the laboratory intact and within holding times.
- (3.) The following cooler temperatures were recorded at sample receipt (Control limits are between 0-6 Degrees Celsius): 0.5, 0.5, 0.6, 0.3, 0.5 degrees Celsius. Please see Chain of Custody for details.

PCB Aroclor Analysis

Analysis for PCB Aroclors was performed by method SW-846 8082A using a dual column GC system. Samples were extracted by USEPA SW-846 Method 3535 Solid Phase Extraction. One-liter water samples were extracted by NEA-PACE SOP NE178_04. The following technical and administrative items were noted for the analysis:

- (1.) The concentration results for Aroclor 1242 were flagged (AD) to denote that an altered Aroclor pattern was observed. Please see certificate of analysis for details.
- (2.) The concentration result for Aroclor 1221 was flagged (PB) to denote that Aroclor 1221 is being used to quantify an altered Aroclor pattern. Actual Aroclor 1221 was not presumed to be present in the sample(s). Please see associated certificate of analysis for details.
- (3.) The surrogates DCBP and TCMX were diluted out for several samples (LAB ID: AP33188, AP33189, AP33190, AP33191, AP33192, and AP33211) due to the high concentration of PCB in the samples. Please see associated certificate of analysis for details.

PCB Aroclor Analysis

Analysis for PCB Aroclors was performed by method SW-846 8082A using a dual column GC system. The following technical and administrative items were noted for the analysis:

(1.) The surrogates DCBP and TCMX were diluted out for (LAB ID: AP33193) due to the high concentration of PCB in the samples. Please see associated certificate of analysis for details.

Respectfully submitted,

Dames Deknas

James T. Wickham Client Services Manager

QUALIFIERS

Organic Laboratory Qualifiers Defined

- B Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.
- D Surrogate was diluted out. The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).
- P Indicates relative percent difference (RPD) between primary and secondary GC column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary GC column analysis exceeds 25 %.
- U Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.
- Z Chromatographic interference due to PCB co-elution.
- * Value not within control limits.

Inorganic Laboratory Qualifiers Defined

- B Denotes analyte observed in associated method blank or digestion blank. Analyte concentration should be considered as estimated.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).
- U Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.
- * Value not within control limits.

SAMPLE CHAIN OF CUSTODY

Pace Analytical*

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

www.pacelabs.com																		<12	1003	64P1:	<u>></u>					
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*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

GC - PCB



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-2

Lab Sample ID: 12100364-01 (AP33185)

Collection Date: 10/21/2012 08:17

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Datah ID	Mathad	Data	A malvest	Init Wt /Val	Einal Wal	Column
Batch ID	Method	Date	Analyst		Final Vol.	Column
Analysis 1: GC23F-1070-		10/30/2012 14:18	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20538	EPA 3535	10/24/2012 09:50	EPC	1060 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-11
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-11
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-11
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-11
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-11
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-11
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-11
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1070-11
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	84.4	60.0	-140		GC23B-1079-11
Decachlorobiphenyl	2051-24-3	86.5	60.0	-140		GC23B-1079-11
Tetrachloro-meta-xylene	877-09-8	85.8	60.0	-140		GC23F-1070-11
Decachlorobiphenyl	2051-24-3	92.6	60.0	-140		GC23F-1070-11
Qualifier column where '*' denote	es value outside the control limits or 'D'	denotes value was diluted out.				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-4

Lab Sample ID: 12100364-02 (AP33186)

Collection Date: 10/21/2012 09:35

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1070-1	12 SW-846 Method 8082	10/30/2012 14:51	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20538	EPA 3535	10/24/2012 09:50	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-12
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-12
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-12
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-12
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-12
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-12
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-12
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1070-12
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	86.2	60.0	-140		GC23B-1079-12
Decachlorobiphenyl	2051-24-3	86.0	60.0	-140		GC23B-1079-12
Tetrachloro-meta-xylene	877-09-8	88.5	60.0	-140		GC23F-1070-12
Decachlorobiphenyl	2051-24-3	93.8		-140		GC23F-1070-12
Qualifier column where '*' denote	s value outside the control limits or 'D'	denotes value was diluted out				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-4D

Lab Sample ID: 12100364-03 (AP33187)

Collection Date: 10/21/2012 09:09

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1070	0-29 SW-846 Method 8082	10/31/2012 00:10	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20538	EPA 3535	10/24/2012 09:50	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-29
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-29
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-29
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-29
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-29
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-29
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-29
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1070-29
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	83.2	60.0	-140		GC23F-1070-29
Decachlorobiphenyl	2051-24-3	92.8	60.0	-140		GC23F-1070-29
Tetrachloro-meta-xylene	877-09-8	81.7	60.0	-140		GC23B-1079-29
Decachlorobiphenyl	2051-24-3	85.8	60.0	-140		GC23B-1079-29
Qualifier column where '*' deno	tes value outside the control limits or 'D'	denotes value was diluted out				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-12

Lab Sample ID: 12100364-04 (AP33188)

Collection Date: 10/21/2012 10:58

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

	Batch ID	Method		Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23F-1072-24	SW-846 Method 8082		11/02/2012 00:01	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Analysis 2:	GC23B-1081-24	SW-846 Method 8082		11/02/2012 00:01	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20538	EPA 3535		10/24/2012 09:50	EPC	1080 mL	10.0 mL	NA
		G . G	_	T. (/T.)				

Analyte	CAS No.	Result (ug/L)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	3.00	60.0	U	GC23B-1081-24
Aroclor 1221	11104-28-2	30.8	3.00	60.0	PB	GC23B-1081-24
Aroclor 1232	11141-16-5	ND	3.00	60.0	U	GC23B-1081-24
Aroclor 1242	53469-21-9	19.5	3.00	60.0	AD	GC23F-1072-24
Aroclor 1248	12672-29-6	ND	3.00	60.0	U	GC23B-1081-24
Aroclor 1254	11097-69-1	ND	3.00	60.0	U	GC23B-1081-24
Aroclor 1260	11096-82-5	ND	3.00	60.0	U	GC23B-1081-24
Total PCB Amount	1336-36-3	50.3		60.0		GC23B-1081-24

			Limits		
Surrogate	CAS No.	% Recovery	(%)	$\mathbf{Q}^{\scriptscriptstyle 1}$	File ID
Tetrachloro-meta-xylene	877-09-8	141	60.0-140	D	GC23F-1072-24
Decachlorobiphenyl	2051-24-3	129	60.0-140	D	GC23F-1072-24
Tetrachloro-meta-xylene	877-09-8	170	60.0-140	D	GC23B-1081-24
Decachlorobiphenyl	2051-24-3	84.0	60.0-140	D	GC23B-1081-24

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Lab Sample ID: 12100364-05 (AP33189)

Analytical Sample Results

Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Collection Date: 10/21/2012 13:30

Project: JARD - BENNINGTON VT Sample Matrix: WATER

Client Sample ID: MW-6 Received Date: 10/22/2012 08:03

Batch ID		Date	Analyst		Final Vol.	Column			
Analysis 1: GC23F-1072		11/02/2012 00:33	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm			
Prep 1: 20538	EPA 3535	10/24/2012 09:50	EPC	1080 mL	10.0 mL	NA			
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID			
Aroclor 1016	12674-11-2	ND	5.00	100	U	GC23F-1072-25			
Aroclor 1221	11104-28-2	60.2	5.00	100	PB	GC23F-1072-25			
Aroclor 1232	11141-16-5	ND	5.00	100	U	GC23F-1072-25			
Aroclor 1242	53469-21-9	26.3	5.00	100	AD	GC23F-1072-25			
Aroclor 1248	12672-29-6	ND	5.00	100	U	GC23F-1072-25			
Aroclor 1254	11097-69-1	ND	5.00	100	U	GC23F-1072-25			
Aroclor 1260	11096-82-5	ND	5.00	100	U	GC23F-1072-25			
Total PCB Amount	1336-36-3	86.5		100		GC23F-1072-25			
			Lin	nits					
Surrogate	CAS No.	% Recovery	(%	(o)	\mathbf{Q}^1	File ID			
Tetrachloro-meta-xylene	877-09-8	179	60.0	-140	D	GC23F-1072-25			
Decachlorobiphenyl	2051-24-3	145	60.0	-140	D	GC23F-1072-25			
Tetrachloro-meta-xylene	877-09-8	200	60.0	-140	D	GC23B-1081-25			
Decachlorobiphenyl	2051-24-3	111		-140	D	GC23B-1081-25			
¹ Qualifier column where '*' denot	Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.								

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-6D

Lab Sample ID: 12100364-06 (AP33190)

Collection Date: 10/21/2012 12:41

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

D		_				0.1
Batch II	O Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-107	2-26 SW-846 Method 8082	11/02/2012 01:06	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20538	EPA 3535	10/24/2012 09:50	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	1.50	30.0	U	GC23F-1072-26
Aroclor 1221	11104-28-2	ND	1.50	30.0	U	GC23F-1072-26
Aroclor 1232	11141-16-5	ND	1.50	30.0	U	GC23F-1072-26
Aroclor 1242	53469-21-9	14.0	1.50	30.0	AD	GC23F-1072-26
Aroclor 1248	12672-29-6	ND	1.50	30.0	U	GC23F-1072-26
Aroclor 1254	11097-69-1	ND	1.50	30.0	U	GC23F-1072-26
Aroclor 1260	11096-82-5	ND	1.50	30.0	U	GC23F-1072-26
Total PCB Amount	1336-36-3	14.0		30.0		GC23F-1072-26
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	115	60.0	-140	D	GC23F-1072-26
Decachlorobiphenyl	2051-24-3	121	60.0	-140	D	GC23F-1072-26
Tetrachloro-meta-xylene	877-09-8	101	60.0	-140	D	GC23B-1081-26
Decachlorobiphenyl	2051-24-3	94.9	60.0	-140	D	GC23B-1081-26
Qualifier column where '*' deno	otes value outside the control limits or 'D'	denotes value was diluted out				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-D2

Lab Sample ID: 12100364-07 (AP33191)

Collection Date: 10/21/2012 14:00

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Analysis 2: GC23F-1072-27 SW-846 Method 8082 11/02/2012 01:39 AJM NA NA Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm		Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
	Analysis 1:	GC23B-1081-27	SW-846 Method 8082	11/02/2012 01:39	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 µm
Prep 1: 20538 EPA 3535 10/24/2012 09:50 EPC 1080 mL 10.0 mL NA	Analysis 2:	GC23F-1072-27	SW-846 Method 8082	11/02/2012 01:39	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Corp. Total Control Co	Prep 1:	20538	EPA 3535	10/24/2012 09:50	EPC	1080 mL	10.0 mL	NA

Analyte	CAS No.	Result (ug/L)	PQL	Dilution Factor	Flags	File ID	
Aroclor 1016	12674-11-2	ND	20.0	400	U	GC23F-1072-27	
Aroclor 1221	11104-28-2	214	20.0	400	PB	GC23F-1072-27	
Aroclor 1232	11141-16-5	ND	20.0	400	U	GC23F-1072-27	
Aroclor 1242	53469-21-9	107	20.0	400	AD	GC23B-1081-27	
Aroclor 1248	12672-29-6	ND	20.0	400	U	GC23F-1072-27	
Aroclor 1254	11097-69-1	ND	20.0	400	U	GC23F-1072-27	
Aroclor 1260	11096-82-5	ND	20.0	400	U	GC23F-1072-27	
Total PCB Amount	1336-36-3	321		400		GC23F-1072-27	

			Limits			
Surrogate	CAS No.	% Recovery	(%)	\mathbf{Q}^1	File ID	
Tetrachloro-meta-xylene	877-09-8	581	60.0-140	D	GC23F-1072-27	
Decachlorobiphenyl	2051-24-3	309	60.0-140	D	GC23F-1072-27	
Tetrachloro-meta-xylene	877-09-8	561	60.0-140	D	GC23B-1081-27	
Decachlorobiphenyl	2051-24-3	3.97	60.0-140	D	GC23B-1081-27	

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-3D

Lab Sample ID: 12100364-08 (AP33192)

Collection Date: 10/21/2012 14:26

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Batch	ID	Method		Date	Analyst	Init Wt./Vol.	Final Vol.	Column	
		SW-846 Method 8082		11/02/2012 02:11	AJM	NA	NA NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 µm	
Prep 1: 20538		EPA 3535		10/24/2012 09:50		1080 mL	10.0 mL	NA	
Analyte		CAS No.	Resu	lt (ug/L)	PQL	Dilution Fac	tor Flags	File ID	
Aroclor 1016		12674-11-2		ND	20.0	400	U	GC23B-1081-28	
Aroclor 1221		11104-28-2		216	20.0	400	PB	GC23B-1081-28	
Aroclor 1232		11141-16-5		ND	20.0	400	U	GC23B-1081-28	
Aroclor 1242		53469-21-9		118	20.0	400	AD	GC23B-1081-28	
Aroclor 1248		12672-29-6		ND	20.0	400	U	GC23B-1081-28	
Aroclor 1254		11097-69-1		ND	20.0	400	U	GC23B-1081-28	
Aroclor 1260		11096-82-5		ND	20.0	400	U	GC23B-1081-28	
Total PCB Amount		1336-36-3		334		400		GC23B-1081-28	
					т :	- : 4			
Surmogata		CAS No.	0/. 1	Р одолудия	Lin		\mathbf{Q}^1	File ID	
Surrogate			70 1	Recovery	(%				
Tetrachloro-meta-xyle	ene	877-09-8		666	60.0		D	GC23F-1072-28	
Decachlorobiphenyl		2051-24-3		249	60.0	-140	D	GC23F-1072-28	
Tetrachloro-meta-xyle	ene	877-09-8		700	60.0	-140	D	GC23B-1081-28	
Decachlorobiphenyl		2051-24-3		130	60.0	-140	D	GC23B-1081-28	
¹ Qualifier column where '*' d	Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.								

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-3 UPPER PHASE

Lab Sample ID: 12100364-09 (AP33193)

Collection Date: 10/21/2012 15:10

Sample Matrix: OIL

Received Date: 10/22/2012 08:03

D /	. 1 .	T . TTT. /TT 1	D: 137.1	G 1
Date	Analyst	Init Wt./Vol.	Final Vol.	Column
10/25/2012 22:23	JKA	NA	NA	Phenomenex, Zebron ZB-1, 30 m, 0.25 mm ID, 0.25 μm
10/24/2012 15:39	CAP	0.518 g	25.0 mL	NA
Result (ug/g)	PQL	Dilution Fact	or Flags	File ID
ND	5000	5000	U	GC20F-1415-43
186000	5000	5000	PB	GC20F-1415-43
ND	5000	5000	U	GC20F-1415-43
163000	5000	5000	AD	GC20F-1415-43
ND	5000	5000	U	GC20F-1415-43
ND	5000	5000	U	GC20F-1415-43
ND	5000	5000	U	GC20F-1415-43
349000		5000		GC20F-1415-43
	т:	.:4a		
0/ Daggaran			$\mathbf{\Omega}^{1}$	Esta ID
% Recovery	(%))	Ų	File ID
0.00	60.0	-140	D	GC20F-1415-43
0.00	60.0	-140	D	GC20F-1415-43
0.00	60.0	-140	D	GC20B-1405-43
0.00		-140	D	GC20B-1405-43
	ND 186000 ND 163000 ND ND ND 163000 ND	ND 5000 ND	Total Color	ND S000 S000 U

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100364

Pace Analytical Services, Inc.

GC23B-1074-11

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-3 LOWER PHASE

Lab Sample ID: 12100364-10 (AP33211)

Collection Date: 10/21/2012 15:10

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Percent Solid: N/A

60.0-140

Ba	atch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC	C23F-1065-11	SW-846 Method 8082	10/25/2012 22:03	JKA	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 205	540	EPA 3510C	10/24/2012 12:45	ТЈН	26.5 mL	10.0 mL	NA
Analyte		CAS No.	Result (ug/L)	PQL	Dilution Fact	tor Flags	File ID
Aroclor 1016		12674-11-2	ND	18900	10000	U	GC23F-1065-11
Aroclor 1221		11104-28-2	191000	18900	10000	PB	GC23F-1065-11
Aroclor 1232		11141-16-5	ND	18900	10000	U	GC23F-1065-11
Aroclor 1242		53469-21-9	173000	18900	10000	AD	GC23F-1065-11
Aroclor 1248		12672-29-6	ND	18900	10000	U	GC23F-1065-11
Aroclor 1254		11097-69-1	ND	18900	10000	U	GC23F-1065-11
Aroclor 1260		11096-82-5	ND	18900	10000	U	GC23F-1065-11
Total PCB Amour	nt	1336-36-3	364000		10000		GC23F-1065-11
				Lin	nits		
Surrogate		CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Tetrachloro-meta-	-xylene	877-09-8	12800	60.0	-140	D	GC23F-1065-11
Decachlorobiphen	ıyl	2051-24-3	4310	60.0	-140	D	GC23F-1065-11
Tetrachloro-meta-	-xylene	877-09-8	13200	60.0	-140	D	GC23B-1074-11

²⁰⁵¹⁻²⁴⁻³ Decachlorobiphenyl 0.00 ¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

Quality Control Samples (Lab)



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33172B)

Lab Sample ID: PBLK-83

Batch 1	ID Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23B-10	079-7 SW-846 Method 8082	10/30/2012 12:08	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20538	EPA 3535	10/24/2012 09:50	EPC	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23B-1079-7
Total PCB Amount	1336-36-3	ND		1.00	U	GC23B-1079-7
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	\mathbf{Q}^1	File ID
Tetrachloro-meta-xyler	ne 877-09-8	85.0	60.0	-140		GC23B-1079-7
Decachlorobiphenyl	2051-24-3	86.2	60.0	-140		GC23B-1079-7

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC **Project:** JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33172B)

Lab Sample ID: PBLK-83

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1070-7		10/30/2012 12:08	AJM	NA NA	NA NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20538	EPA 3535	10/24/2012 09:50	EPC	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-7
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1070-7
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	88.0	60.0	-140		GC23F-1070-7
Decachlorobiphenyl	2051-24-3	94.7	60.0	-140		GC23F-1070-7

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33172L)

Client Sample ID: Lab Control Sample (AP33172L)

Client Sample ID: Lab Control Sample (AP33172L)

Lab Sample ID: LCS-83 Percent Solid: N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23B-1079-8	SW-846 Method 8082	10/30/2012 12:40	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 µm
Prep 1:	20538	EPA 3535	10/24/2012 09:50	EPC	1000 mL	10.0 mL	NA

		Added	LCS	LCS	Limits	
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	Q ' (%)	
Aroclor 1221	11104-28-2	0.500	0.454	90.7	70.0-130	

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits		
Surrogate	CAS No.	% Recovery	(%)	$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	85.3	60.0-140	(GC23B-1079-8
Decachlorobiphenyl	2051-24-3	92.7	60.0-140	(GC23B-1079-8

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33172L)

Lab Sample ID: LCS-83

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
	Datell ID	Michiod	Date	Amaryst	1111t VV t./ V O1.	I IIIai VOI.	Column
Analysis 1:	GC23F-1070-8	SW-846 Method 8082	10/30/2012 12:40	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20538	EPA 3535	10/24/2012 09:50	EPC	1000 mL	10.0 mL	NA

		Added	LCS	LCS	Limits	
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	Q' (%)	
Aroclor 1221	11104-28-2	0.500	0.461	92.2	70.0-130	

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits			
Surrogate	CAS No.	% Recovery	(%)	$\mathbf{Q}^{^{1}}$	File ID	
Tetrachloro-meta-xylene	877-09-8	85.1	60.0-140		GC23F-1070-8	
Decachlorobiphenyl	2051-24-3	97.7	60.0-140		GC23F-1070-8	

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC **Project:** JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33193B)

Lab Sample ID: PBLK-88

Batch II) Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC20B-140	5-41 SW-846 8082 (PCB)	10/25/2012 21:58	JKA	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20545	EPA 3580A	10/24/2012 15:35	CAP	0.567 g	25.0 mL	NA
Analyte	CAS No.	Result (ug/g)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	1.00	1.00	U	GC20B-1405-41
Aroclor 1221	11104-28-2	ND	1.00	1.00	U	GC20B-1405-41
Aroclor 1232	11141-16-5	ND	1.00	1.00	U	GC20B-1405-41
Aroclor 1242	53469-21-9	ND	1.00	1.00	U	GC20B-1405-41
Aroclor 1248	12672-29-6	ND	1.00	1.00	U	GC20B-1405-41
Aroclor 1254	11097-69-1	ND	1.00	1.00	U	GC20B-1405-41
Aroclor 1260	11096-82-5	ND	1.00	1.00	U	GC20B-1405-41
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC20B-1405-41
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	109	60.0	-140		GC20B-1405-41
Decachlorobiphenyl	2051-24-3	109	60.0	-140		GC20B-1405-41

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC **Project:** JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33193B)

Lab Sample ID: PBLK-88

Dotah II) Mathad	Data	Amalriat	Init Wt /Val	Einal Wal	Column
Batch II		Date	Analyst		Final Vol.	Column
Analysis 1: GC20F-141	, ,	10/25/2012 21:58	JKA	NA	NA	Phenomenex, Zebron ZB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20545	EPA 3580A	10/24/2012 15:35	CAP	0.567 g	25.0 mL	NA
Analyte	CAS No.	Result (ug/g)	PQL	Dilution Facto	r Flags	File ID
Aroclor 1016	12674-11-2	ND	1.00	1.00	U	GC20F-1415-41
Aroclor 1221	11104-28-2	ND	1.00	1.00	U	GC20F-1415-41
Aroclor 1232	11141-16-5	ND	1.00	1.00	U	GC20F-1415-41
Aroclor 1242	53469-21-9	ND	1.00	1.00	U	GC20F-1415-41
Aroclor 1248	12672-29-6	ND	1.00	1.00	U	GC20F-1415-41
Aroclor 1254	11097-69-1	ND	1.00	1.00	U	GC20F-1415-41
Aroclor 1260	11096-82-5	ND	1.00	1.00	U	GC20F-1415-41
Total PCB Amount > RL	1336-36-3	ND		1.00	U	GC20F-1415-41
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	111	60.0	-140		GC20F-1415-41
Decachlorobiphenyl	2051-24-3	113	60.0	-140		GC20F-1415-41

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33193L)

Lab Sample ID: LCS-88

	Batch ID Method	Date A	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC20B-1405-42 SW-846 8082 (PCB)	10/25/2012 22:11	JKA	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20545 EPA 3580A	10/24/2012 15:35	CAP	0.517 g	25.0 mL	NA

		Added	LCS	LCS	Limits	
Analyte Spiked	CAS No.	(ug/g)	(ug/g)	% Rec.	Q ' (%)	
Aroclor 1260	11096-82-5	24.2	27.2	112	70.0-130	

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits		
Surrogate	CAS No.	% Recovery	(%)	Q¹ File ID	- 1
Tetrachloro-meta-xylene	877-09-8	113	60.0-140	GC20B-1405-42	
Decachlorobiphenyl	2051-24-3	112	60.0-140	GC20B-1405-42	

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33193L)

Lab Sample ID: LCS-88

		Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
	Analysis 1:	GC20F-1415-42	SW-846 8082 (PCB)	10/25/2012 22:10	JKA	NA	NA	Phenomenex, Zebron ZB-1, 30 m, 0.25 mm ID, 0.25 µm
l	Prep 1:	20545	EPA 3580A	10/24/2012 15:35	CAP	0.517 g	25.0 mL	NA

		Added	LCS	LCS	Limits	
Analyte Spiked	CAS No.	(ug/g)	(ug/g)	% Rec.	$\mathbf{Q}^{^{1}}$ (%)	
Aroclor 1260	11096-82-5	24.2	26.0	108	70.0-130	

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits		
Surrogate	CAS No.	% Recovery	(%)	Q ¹ File II	D
Tetrachloro-meta-xylene	877-09-8	108	60.0-140	GC20F-14	115-42
Decachlorobiphenyl	2051-24-3	112	60.0-140	GC20F-14	115-42

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33211B)

Lab Sample ID: PBLK-85

Batch II	D Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23B-10'		10/25/2012 20:58	JKA	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20540	EPA 3510C	10/24/2012 12:45	TJH	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23B-1074-9
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23B-1074-9
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23B-1074-9
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23B-1074-9
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23B-1074-9
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23B-1074-9
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23B-1074-9
Total PCB Amount	1336-36-3	ND		1.00	U	GC23B-1074-9
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	e 877-09-8	85.9	60.0	-140		GC23B-1074-9
Decachlorobiphenyl	2051-24-3	84.6	60.0	-140		GC23B-1074-9

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC
Project: JARD - BENNINGTON VT
Sample Matrix: WATER
Client Sample ID: Method Blank (AP33211B)
Received Date: N/A
Lab Sample ID: PBLK-85
Percent Solid: N/A

Batch II	O Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-106	55-9 SW-846 Method 8082	10/25/2012 20:58	JKA	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20540	EPA 3510C	10/24/2012 12:45	ТЈН	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1065-9
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1065-9
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1065-9
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1065-9
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1065-9
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1065-9
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1065-9
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1065-9
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	89.0	60.0	-140		GC23F-1065-9
Decachlorobiphenyl	2051-24-3	92.8	60.0	-140		GC23F-1065-9

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33211L)

Lab Sample ID: LCS-85

		Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
	Analysis 1:	GC23B-1074-10	SW-846 Method 8082	10/25/2012 21:30	JKA	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 µm
l	Prep 1:	20540	EPA 3510C	10/24/2012 12:45	TJH	1000 mL	10.0 mL	NA

		Added	LCS	LCS	Limits
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	Q' (%)
Aroclor 1260	11096-82-5	0.500	0.439	87.8	70.0-130

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits		
Surrogate	CAS No.	% Recovery	(%)	$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	89.3	60.0-140		GC23B-1074-10
Decachlorobiphenyl	2051-24-3	88.0	60.0-140		GC23B-1074-10

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100364

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33211L)

Lab Sample ID: LCS-85

	Batch ID Method	Date An	alyst Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23F-1065-10 SW-846 Method 8082	10/25/2012 21:30 JK	A NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20540 EPA 3510C	10/24/2012 12:45 TJ	H 1000 mL	10.0 mL	NA

		Added	LCS	LCS	Limits	
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	Q' (%)	
Aroclor 1260	11096-82-5	0.500	0.474	94.8	70.0-130	

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits	
Surrogate	CAS No.	% Recovery	(%)	Q¹ File ID
Tetrachloro-meta-xylene	877-09-8	91.1	60.0-140	GC23F-1065-10
Decachlorobiphenyl	2051-24-3	96.1	60.0-140	GC23F-1065-10

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Pace Analytical e-Report

Report prepared for:

THE JOHNSON COMPANY, INC 100 STATE ST SUITE 600 MONTPELIER, VT 05602 CONTACT: DAN BASTON

Project ID: JARD - BENNINGTON VT **Sampling Date(s):** October 20, 2012

Lab Report ID: 12100363

Client Service Contact: James Wickham (518) 346-4592

Analysis Included: PCB Analysis (Water)

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is respondible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Jan Pfelger

Dan Pfalzer Laboratory Director



Certifications: NYS (EPA: NY00906, ELAP: 11078), NJ (NY026), CT (PH-0337), MA(M-NY906), NC (668)

Pace Analytical Services, Inc.| 2190 Technology Drive | Schenectady, NY 12308 Phone: 518.346.4592 | internet: www.pacelabs.com This page intentionally left blank.

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CASE NARRATIVE

CASE NARRATIVE

This data package (SDG ID: 12100363) consists of 11 water samples received on 10/22/2012. The samples are from Project Name: JARD - BENNINGTON VT.

This sample delivery group consists of the following samples:

1 1 0 1 TD	CII I ID	
<u>Lab Sample ID</u>	<u>Client ID</u>	Collection Date
AP33174	EPA-3	10/20/2012 18:37
AP33175	EPA-100	10/20/2012 07:46
AP33176	MW-1	10/20/2012 17:32
AP33177	PZ-12	10/20/2012 16:16
AP33178	PZ-13	10/20/2012 12:59
AP33179	PZ-14	10/20/2012 14:52
AP33180	PZ-15	10/20/2012 11:22
AP33181	PZ-16	10/20/2012 09:37
AP33182	PZ-17	10/20/2012 17:25
AP33183	PZ-21	10/20/2012 08:20
AP33184	PZ-D	10/20/2012 12:17

Sample Delivery and Receipt Conditions

- (1.) All samples were delivered to the laboratory via DROP OFF delivery service on 10/22/2012.
- (2.) All samples were received at the laboratory intact and within holding times.
- (3.) The following cooler temperatures were recorded at sample receipt (Control limits are between 0-6 Degrees Celsius): 0.5, 0.5, 0.6, 0.3, 0.5 degrees Celsius. Please see Chain of Custody for details.

PCB Aroclor Analysis

Analysis for PCB Aroclors was performed by method SW-846 8082A using a dual column GC system. Samples were extracted by USEPA SW-846 Method 3535 Solid Phase Extraction. One-liter water samples were extracted by NEA-PACE SOP NE178_04. The following technical and administrative items were noted for the analysis:

- (1.) The concentration results for Aroclor 1242 were flagged (AD) to denote that an altered Aroclor pattern was observed. Please see certificate of analysis for details.
- (2.) The concentration result for Aroclor 1221 was flagged (PB) to denote that Aroclor 1221 is being used to quantify an altered Aroclor pattern. Actual Aroclor 1221 was not presumed to be present in the sample(s). Please see associated certificate of analysis for details.
- (3.) The concentration result for Aroclor 1248 was flagged (PE) to denote that Aroclor 1248 is being used to quantify an altered Aroclor pattern. Actual Aroclor 1248 was not presumed to be present in the sample(s). Please see associated certificate of analysis for details.

Respectfully submitted,

James Derman

James T. Wickham Client Services Manager

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QUALIFIERS

Organic Laboratory Qualifiers Defined

- B Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.
- D Surrogate was diluted out. The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).
- P Indicates relative percent difference (RPD) between primary and secondary GC column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary GC column analysis exceeds 25 %.
- U Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.
- Z Chromatographic interference due to PCB co-elution.
- * Value not within control limits.

Inorganic Laboratory Qualifiers Defined

- B Denotes analyte observed in associated method blank or digestion blank. Analyte concentration should be considered as estimated.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).
- U Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.
- * Value not within control limits.

SAMPLE CHAIN OF CUSTODY



CHAIN-OF-CUSTODY / Analytical Request Document

Chain-of-Custody is a LEGAL DOCUMENT.	All relevant fields must be o	ompleted accurately.
		~12100303F1>

www.pacelabs.com						Page:	2 of _	S
ection A lequired Client Information:	Section B Required Project Information:		Section C Invoice Information:	 	21303631	i	158994	4
	Report To: Daniel B	acton	Attention:				<u> </u>	
The Johnson Company Pages State Street, Suite 600 Montpelier, UT 05602	Сору То:		Company Name:		REGULATORY A			
100 State Smeet, Swite 100			Address:		NPDES T	GROUND W	VATER DRINK	NG WATER
Montpelier, VI 05602	Purchase Order No.: 2-77	100	Pace Quote		UST I	RCRA	OTHER	
mail To: DP BO SCOMAIL.COM		18-5	Reference: Pace Project		Site Location			
(\$0°1)229-4600 (\$02)229-5876	Project Name: 5 AR	<u>-U</u>	Manager: Pace Profile #:		STATE:	<u> </u>		
Requested Due Date/TAJ:	Project Number: 3-23	18-5	1 400 1 10110 11	D	Analysis Filtered	(Y/N)		
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Section D Required Client Information SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE 1	CODE ter DW TTRIX CODE (see valid codes to le COMPO STAR CODE COMPO STAR CODE (see valid codes to le COMPO STAR CODE COMPO STAR C	TIME DATE TIME WS 10/10/12/0746 15 10/20/12/07	TIME ACCEPT HING: HING: HOISE HO	X X X X X X X X X X X X X X X X X X X		TIME 8:03 0	AP33174 AP33176 AP33176 AP33178 AP33178 AP33180 AP33180 AP33181 AP33181 AP33181 AP33184 SAMPLE CON	DITIONS
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4	ORIGINAL	SAMPLER NAME AND SIGNATU PRINT Name of SAMPLE SIGNATURE of SAMPLE	R: Daniel Bas	DATE Signer (MM/DD/YY	1d 10/21/12		Temp in "C Received on Ice (Y/N) Custody Variable Cooler Cooler Cooler	

GC - PCB



Aroclor 1254

Aroclor 1260

Total PCB Amount

Analytical Sample Results

Job Number: 12100363

Pace Analytical Services, Inc.

GC23B-1081-30

GC23B-1081-30

GC23B-1081-30

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Collection Date: 10/20/2012 18:37

Project: JARD - BENNINGTON VT

Client Sample ID: EPA-3

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Lab Sample ID: 12100363-01 (AP33174) **Percent Solid:** N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23B-1081-30	SW-846 Method 8082	11/02/2012 03:17	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 µm
Prep 1:	20553	EPA 3535	10/25/2012 09:35	EPC	1030 mL	10.0 mL	NA
Analyte		CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016		12674-11-2	ND	0.0500	1.00	U	GC23B-1081-30
Aroclor 1221		11104-28-2	0.105	0.0500	1.00	PB	GC23B-1081-30
Aroclor 1232		11141-16-5	ND	0.0500	1.00	U	GC23B-1081-30
Aroclor 1242		53469-21-9	ND	0.0500	1.00	U	GC23B-1081-30
Aroclor 1248		12672-29-6	ND	0.0500	1.00	U	GC23B-1081-30

0.0500

0.0500

1.00

1.00

1.00

U

Surrogate	CAS No.	% Recovery	Limits (%)	Q ¹ File ID
Tetrachloro-meta-xylene	877-09-8	83.6	60.0-140	GC23F-1072-30
Decachlorobiphenyl	2051-24-3	92.0	60.0-140	GC23F-1072-30
Tetrachloro-meta-xylene	877-09-8	86.7	60.0-140	GC23B-1081-30
Decachlorobinhenyl	2051-24-3	90.5	60.0-140	GC23B-1081-30

Decachlorobiphenyl 2051-24-3 90.5

Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

11097-69-1

11096-82-5

1336-36-3

ND

ND

0.105

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Lab Sample ID: 12100363-02 (AP33175)

Analytical Sample Results

Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Collection Date: 10/20/2012 07:46

Project: JARD - BENNINGTON VT Sample Matrix: WATER

Client Sample ID: EPA-100 Received Date: 10/22/2012 08:03

Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
-31 SW-846 Method 8082	11/02/2012 03:49	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
EPA 3535	10/25/2012 09:35	EPC	1080 mL	10.0 mL	NA
CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
12674-11-2	ND	0.0500	1.00	U	GC23F-1072-31
11104-28-2	0.0819	0.0500	1.00	PB	GC23F-1072-31
11141-16-5	ND	0.0500	1.00	U	GC23F-1072-31
53469-21-9	0.0585	0.0500	1.00	AD	GC23F-1072-31
12672-29-6	ND	0.0500	1.00	U	GC23F-1072-31
11097-69-1	ND	0.0500	1.00	U	GC23F-1072-31
11096-82-5	ND	0.0500	1.00	U	GC23F-1072-31
1336-36-3	0.1404		1.00		GC23F-1072-31
		Lin	nits		
CAS No.	% Recovery			${\bf Q}^1$	File ID
877-09-8	85.8	60.0	-140		GC23F-1072-31
2051-24-3	96.6	60.0	-140		GC23F-1072-31
877-09-8	86.0	60.0	-140		GC23B-1081-31
2051-24-3	92.6	60.0	-140		GC23B-1081-31
	-31 SW-846 Method 8082 EPA 3535 CAS No. 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 11096-82-5 1336-36-3 CAS No. 877-09-8 2051-24-3 877-09-8 2051-24-3	-31 SW-846 Method 8082 EPA 3535 CAS No. Result (ug/L) 12674-11-2 11104-28-2 11141-16-5 53469-21-9 12672-29-6 11097-69-1 ND 11096-82-5 ND 1336-36-3 CAS No. Result (ug/L) ND 0.0585 ND 0.1404 CAS No. Recovery 877-09-8 2051-24-3 877-09-8 2051-24-3 96.6 877-09-8 2051-24-3 92.6	-31 SW-846 Method 8082 11/02/2012 03:49 AJM EPA 3535 10/25/2012 09:35 EPC CAS No. Result (ug/L) PQL 12674-11-2 ND 0.0500 11104-28-2 0.0819 0.0500 11141-16-5 ND 0.0500 53469-21-9 0.0585 0.0500 12672-29-6 ND 0.0500 11097-69-1 ND 0.0500 11096-82-5 ND 0.0500 1336-36-3 0.1404 CAS No. Recovery (% 877-09-8 85.8 60.0 877-09-8 86.0 60.0 877-09-8 86.0 60.0 2051-24-3 92.6 60.0	CAS No. Result (ug/L) PQL Dilution Factor	-31 SW-846 Method 8082 EPA 3535 11/02/2012 03:49 EPA 3535 10/25/2012 09:35 EPC 1080 mL 10.0 mL CAS No. Result (ug/L) PQL Dilution Factor Flags 12674-11-2 ND 0.0500 1.00 U 11104-28-2 0.0819 0.0500 1.00 PB 11141-16-5 ND 0.0500 1.00 U 53469-21-9 0.0585 0.0500 1.00 U 11097-69-1 ND 0.0500 1.00 U 11097-69-1 ND 0.0500 1.00 U 11096-82-5 ND 0.0500 1.00 U 1336-36-3 1.00 Limits (%) CAS No. Recovery (%) Q¹ 877-09-8 85.8 60.0-140 877-09-8 85.8 60.0-140 877-09-8 86.0 60.0-140 877-09-8 86.0 60.0-140 2051-24-3 92.6 60.0-140

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-1

Lab Sample ID: 12100363-03 (AP33176)

Collection Date: 10/20/2012 17:32

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Batch II	O Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column	
Analysis 1: GC23F-107		11/02/2012 04:55	AJM	NA NA	NA NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm	
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1080 mL	10.0 mL	NA	
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID	
Aroclor 1016	12674-11-2	ND	0.300	6.00	U	GC23F-1072-33	
Aroclor 1221	11104-28-2	ND	0.300	6.00	U	GC23F-1072-33	
Aroclor 1232	11141-16-5	ND	0.300	6.00	U	GC23F-1072-33	
Aroclor 1242	53469-21-9	ND	0.300	6.00	U	GC23F-1072-33	
Aroclor 1248	12672-29-6	1.54	0.300	6.00	PE	GC23F-1072-33	
Aroclor 1254	11097-69-1	ND	0.300	6.00	U	GC23F-1072-33	
Aroclor 1260	11096-82-5	ND	0.300	6.00	U	GC23F-1072-33	
Total PCB Amount	1336-36-3	1.54		6.00		GC23F-1072-33	
			Lin	nits			
Surrogate	CAS No.	% Recovery	(%		$\mathbf{Q}^{^{1}}$	File ID	
Tetrachloro-meta-xylene	877-09-8	90.8	60.0	-140		GC23F-1072-33	
Decachlorobiphenyl	2051-24-3	101	60.0	-140		GC23F-1072-33	
Tetrachloro-meta-xylene	877-09-8	93.3	60.0	-140		GC23B-1081-33	
Decachlorobiphenyl	2051-24-3	91.3		-140		GC23B-1081-33	
Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.							

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: PZ-12

Lab Sample ID: 12100363-04 (AP33177)

Collection Date: 10/20/2012 16:16

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

				·		
Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1072-3	34 SW-846 Method 8082	11/02/2012 05:27	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1072-34
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1072-34
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1072-34
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1072-34
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1072-34
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1072-34
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1072-34
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1072-34
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	82.8	60.0	-140		GC23F-1072-34
Decachlorobiphenyl	2051-24-3	94.0	60.0	-140		GC23F-1072-34
Tetrachloro-meta-xylene	877-09-8	86.4	60.0	-140		GC23B-1081-34
Decachlorobiphenyl	2051-24-3	91.4		-140		GC23B-1081-34
Qualifier column where '*' denote	s value outside the control limits or 'D'	denotes value was diluted out				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: PZ-13

Lab Sample ID: 12100363-05 (AP33178)

Collection Date: 10/20/2012 12:59

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

				·		
Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23B-1081-	-35 SW-846 Method 8082	11/02/2012 06:00	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.100	2.00	U	GC23B-1081-35
Aroclor 1221	11104-28-2	ND	0.100	2.00	U	GC23B-1081-35
Aroclor 1232	11141-16-5	ND	0.100	2.00	U	GC23B-1081-35
Aroclor 1242	53469-21-9	ND	0.100	2.00	U	GC23B-1081-35
Aroclor 1248	12672-29-6	0.475	0.100	2.00	PE	GC23B-1081-35
Aroclor 1254	11097-69-1	ND	0.100	2.00	U	GC23B-1081-35
Aroclor 1260	11096-82-5	ND	0.100	2.00	U	GC23B-1081-35
Total PCB Amount	1336-36-3	0.475		2.00		GC23B-1081-35
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	87.6	60.0	-140		GC23F-1072-35
Decachlorobiphenyl	2051-24-3	98.4	60.0	-140		GC23F-1072-35
Tetrachloro-meta-xylene	877-09-8	91.5	60.0	-140		GC23B-1081-35
Decachlorobiphenyl	2051-24-3	96.4		-140		GC23B-1081-35
Qualifier column where '*' denote	es value outside the control limits or 'D'	denotes value was diluted out				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Lab Sample ID: 12100363-06 (AP33179)

Analytical Sample Results

Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC **Collection Date:** 10/20/2012 14:52

Project: JARD - BENNINGTON VT Sample Matrix: WATER

Client Sample ID: PZ-14 **Received Date:** 10/22/2012 08:03

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23B-1081	-36 SW-846 Method 8082	11/02/2012 06:33	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1060 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.300	6.00	U	GC23B-1081-36
Aroclor 1221	11104-28-2	ND	0.300	6.00	U	GC23B-1081-36
Aroclor 1232	11141-16-5	ND	0.300	6.00	U	GC23B-1081-36
Aroclor 1242	53469-21-9	ND	0.300	6.00	U	GC23B-1081-36
Aroclor 1248	12672-29-6	1.27	0.300	6.00	PE	GC23B-1081-36
Aroclor 1254	11097-69-1	ND	0.300	6.00	U	GC23B-1081-36
Aroclor 1260	11096-82-5	ND	0.300	6.00	U	GC23B-1081-36
Total PCB Amount	1336-36-3	1.27		6.00		GC23B-1081-36
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	85.4	60.0	-140		GC23F-1072-36
Decachlorobiphenyl	2051-24-3	105	60.0	-140		GC23F-1072-36
Tetrachloro-meta-xylene	877-09-8	94.9	60.0	-140		GC23B-1081-36
Decachlorobiphenyl	2051-24-3	98.0	60.0	-140		GC23B-1081-36
Qualifier column where '*' denote	tes value outside the control limits or 'D'	denotes value was diluted out				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: PZ-15

Lab Sample ID: 12100363-07 (AP33180)

Collection Date: 10/20/2012 11:22

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column	
Analysis 1: GC23F-1072-3	7 SW-846 Method 8082	11/02/2012 07:05	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm	
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1080 mL	10.0 mL	NA	
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID	
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1072-37	
Aroclor 1221	11104-28-2	0.0538	0.0500	1.00	PB	GC23F-1072-37	
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1072-37	
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1072-37	
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1072-37	
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1072-37	
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1072-37	
Total PCB Amount	1336-36-3	0.0538		1.00		GC23F-1072-37	
			Lin	nits			
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID	
Tetrachloro-meta-xylene	877-09-8	82.8	60.0	-140		GC23F-1072-37	
Decachlorobiphenyl	2051-24-3	95.0	60.0	-140		GC23F-1072-37	
Tetrachloro-meta-xylene	877-09-8	80.8	60.0	-140		GC23B-1081-37	
Decachlorobiphenyl	2051-24-3	87.3	60.0	-140		GC23B-1081-37	
Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.							

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: PZ-16

Lab Sample ID: 12100363-08 (AP33181)

Collection Date: 10/20/2012 09:37

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

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Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1072-3	8 SW-846 Method 8082	11/02/2012 07:38	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1072-38
Aroclor 1221	11104-28-2	0.0742	0.0500	1.00	PB	GC23F-1072-38
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1072-38
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1072-38
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1072-38
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1072-38
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1072-38
Total PCB Amount	1336-36-3	0.0742		1.00		GC23F-1072-38
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	83.6	60.0	-140		GC23F-1072-38
Decachlorobiphenyl	2051-24-3	95.2	60.0	-140		GC23F-1072-38
Tetrachloro-meta-xylene	877-09-8	84.1	60.0	-140		GC23B-1081-38
Decachlorobiphenyl	2051-24-3	89.7	60.0	-140		GC23B-1081-38
¹ Qualifier column where '*' denotes	s value outside the control limits or 'D'	denotes value was diluted out.				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: PZ-17

Lab Sample ID: 12100363-09 (AP33182)

Collection Date: 10/20/2012 17:25

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1072	2-39 SW-846 Method 8082	11/02/2012 08:11	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1072-39
Aroclor 1221	11104-28-2	0.0715	0.0500	1.00	PB	GC23F-1072-39
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1072-39
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1072-39
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1072-39
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1072-39
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1072-39
Total PCB Amount	1336-36-3	0.0715		1.00		GC23F-1072-39
			Lin	nite		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	84.3	60.0	-140		GC23F-1072-39
Decachlorobiphenyl	2051-24-3	95.9	60.0	-140		GC23F-1072-39
Tetrachloro-meta-xylene	877-09-8	85.8	60.0	-140		GC23B-1081-39
Decachlorobiphenyl	2051-24-3	91.4	60.0	-140		GC23B-1081-39
¹ Qualifier column where '*' deno	tes value outside the control limits or 'D'	denotes value was diluted out.				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: PZ-21

Lab Sample ID: 12100363-10 (AP33183)

Collection Date: 10/20/2012 08:20

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column		
Analysis 1: GC23F-1072-4	40 SW-846 Method 8082	11/02/2012 08:44	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm		
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1010 mL	10.0 mL	NA		
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	r Flags	File ID		
Aroclor 1016	12674-11-2	ND	0.100	2.00	U	GC23F-1072-40		
Aroclor 1221	11104-28-2	ND	0.100	2.00	U	GC23F-1072-40		
Aroclor 1232	11141-16-5	ND	0.100	2.00	U	GC23F-1072-40		
Aroclor 1242	53469-21-9	0.374	0.100	2.00	AD	GC23F-1072-40		
Aroclor 1248	12672-29-6	ND	0.100	2.00	U	GC23F-1072-40		
Aroclor 1254	11097-69-1	ND	0.100	2.00	U	GC23F-1072-40		
Aroclor 1260	11096-82-5	ND	0.100	2.00	U	GC23F-1072-40		
Total PCB Amount	1336-36-3	0.374		2.00		GC23F-1072-40		
			Lin	nits				
Surrogate	CAS No.	% Recovery	(%		$\mathbf{Q}^{^{1}}$	File ID		
Tetrachloro-meta-xylene	877-09-8	85.9	60.0	-140		GC23F-1072-40		
Decachlorobiphenyl	2051-24-3	96.1	60.0	-140		GC23F-1072-40		
Tetrachloro-meta-xylene	877-09-8	88.2	60.0	-140		GC23B-1081-40		
Decachlorobiphenyl	2051-24-3	90.9		-140		GC23B-1081-40		
1Qualifier column where 1*1 denotes value outside the control limits or 'D' denotes value was diluted out.								

Quantier column where * denotes value outside the control limits of D denotes value wa

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.



Lab Sample ID: 12100363-11 (AP33184)

Analytical Sample Results

Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC **Collection Date:** 10/20/2012 12:17

Project: JARD - BENNINGTON VT **Sample Matrix:** WATER

Client Sample ID: PZ-D **Received Date:** 10/22/2012 08:03

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1072-4	1 SW-846 Method 8082	11/02/2012 09:16	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1070 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.100	2.00	U	GC23F-1072-41
Aroclor 1221	11104-28-2	ND	0.100	2.00	U	GC23F-1072-41
Aroclor 1232	11141-16-5	ND	0.100	2.00	U	GC23F-1072-41
Aroclor 1242	53469-21-9	ND	0.100	2.00	U	GC23F-1072-41
Aroclor 1248	12672-29-6	0.472	0.100	2.00	PE	GC23F-1072-41
Aroclor 1254	11097-69-1	ND	0.100	2.00	U	GC23F-1072-41
Aroclor 1260	11096-82-5	ND	0.100	2.00	U	GC23F-1072-41
Total PCB Amount	1336-36-3	0.472		2.00		GC23F-1072-41
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	86.7	60.0	-140		GC23F-1072-41
Decachlorobiphenyl	2051-24-3	98.0	60.0	-140		GC23F-1072-41
Tetrachloro-meta-xylene	877-09-8	87.9	60.0	-140		GC23B-1081-41
Decachlorobiphenyl	2051-24-3	93.8		-140		GC23B-1081-41
1 Qualifier column where '*' denotes	s value outside the control limits or 'D'	denotes value was diluted out				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.

Quality Control Samples (Lab)



Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC **Project:** JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33174B)

Lab Sample ID: PBLK-93

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23B-1080-9	SW-846 Method 8082	10/31/2012 16:10	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	r Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23B-1080-9
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23B-1080-9
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23B-1080-9
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23B-1080-9
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23B-1080-9
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23B-1080-9
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23B-1080-9
Total PCB Amount	1336-36-3	ND		1.00	U	GC23B-1080-9
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	82.1	60.0	-140		GC23B-1080-9
Decachlorobiphenyl	2051-24-3	84.6	60.0	-140		GC23B-1080-9

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100363

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33174B)

Lab Sample ID: PBLK-93

Batch ID	• Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-107	I-9 SW-846 Method 8082	10/31/2012 16:10	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20553	EPA 3535	10/25/2012 09:35	EPC	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1071-9
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1071-9
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1071-9
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1071-9
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1071-9
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1071-9
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1071-9
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1071-9
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	80.9	60.0	-140		GC23F-1071-9
Decachlorobiphenyl	2051-24-3	87.9	60.0	-140		GC23F-1071-9

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33174L)

Lab Sample ID: LCS-93

	Batch ID Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23B-1081-29 SW-846 Method 8	082 11/02/2012 02:44	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 µm
Prep 1:	20553 EPA 3535	10/25/2012 09:35	EPC	1000 mL	10.0 mL	NA

		Added	LCS	LCS	Limits	
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	$\mathbf{Q}^{^{1}}$ (%)	
Aroclor 1242	53469-21-9	0.500	0.436	87.3	70.0-130	

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits	
Surrogate	CAS No.	% Recovery	(%)	Q¹ File ID
Tetrachloro-meta-xylene	877-09-8	77.8	60.0-140	GC23B-1081-29
Decachlorobiphenyl	2051-24-3	87.0	60.0-140	GC23B-1081-29

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100363

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33174L)

Lab Sample ID: LCS-93

	Batch ID Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23F-1072-29 SW-846 Method 8082	11/02/2012 02:44	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20553 EPA 3535	10/25/2012 09:35	EPC	1000 mL	10.0 mL	NA

		Added	LCS	LCS	Limits	
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	Q' (%)	
Aroclor 1242	53469-21-9	0.500	0.471	94.3	70.0-130	

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits		
Surrogate	CAS No.	% Recovery	(%)	Q ¹ File ID	
Tetrachloro-meta-xylene	877-09-8	77.6	60.0-140	GC23F-1072-29	
Decachlorobiphenyl	2051-24-3	92.2	60.0-140	GC23F-1072-29	

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Pace Analytical e-Report

Report prepared for: THE JOHNSON COMPANY, INC

100 STATE ST SUITE 600

MONTPELIER, VT 05602 CONTACT: DAN BASTON

Project ID: JARD - BENNINGTON VT **Sampling Date(s):** October 19, 2012

Lab Report ID: 12100362

Client Service Contact: James Wickham (518) 346-4592

Analysis Included: PCB Analysis (Water)

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is respondible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Jan Pfelger

Dan Pfalzer Laboratory Director



Certifications: NYS (EPA: NY00906, ELAP: 11078), NJ (NY026), CT (PH-0337), MA(M-NY906), NC (668)

Pace Analytical Services, Inc. | 2190 Technology Drive | Schenectady, NY 12308 Phone: 518.346.4592 | internet: www.pacelabs.com This page intentionally left blank.

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CASE NARRATIVE

CASE NARRATIVE

This data package (SDG ID: 12100362) consists of 2 water samples received on 10/22/2012. The samples are from Project Name: JARD - BENNINGTON VT.

This sample delivery group consists of the following samples:

<u>Lab Sample ID</u>	Client ID	Collection Date
AP33172	MW-13	10/19/2012 15:22
AP33173	MW-10	10/19/2012 16:47

Sample Delivery and Receipt Conditions

- (1.) All samples were delivered to the laboratory via DROP OFF delivery service on 10/22/2012.
- (2.) All samples were received at the laboratory intact and within holding times.
- (3.) The following cooler temperatures were recorded at sample receipt (Control limits are between 0-6 Degrees Celsius): 0.5, 0.5, 0.6, 0.3, 0.5 degrees Celsius. Please see Chain of Custody for details.

PCB Aroclor Analysis

Analysis for PCB Aroclors was performed by method SW-846 8082A using a dual column GC system. Samples were extracted by USEPA SW-846 Method 3535 Solid Phase Extraction. One-liter water samples were extracted by NEA-PACE SOP NE178 04. The following technical and administrative items were noted for the analysis:

- (1.) The concentration results for Aroclor 1242 were flagged (AD) to denote that an altered Aroclor pattern was observed. Please see certificate of analysis for details.
- (2.) The concentration result for Aroclor 1248 was flagged (PE) to denote that Aroclor 1248 is being used to quantify an altered Aroclor pattern. Actual Aroclor 1248 was not presumed to be present in the sample(s). Please see associated certificate of analysis for details.

Respectfully submitted,

Danier Derna

James T. Wickham

Client Services Manager

QUALIFIERS

Organic Laboratory Qualifiers Defined

- B Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.
- D Surrogate was diluted out. The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).
- P Indicates relative percent difference (RPD) between primary and secondary GC column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary GC column analysis exceeds 25 %.
- U Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.
- Z Chromatographic interference due to PCB co-elution.
- * Value not within control limits.

Inorganic Laboratory Qualifiers Defined

- B Denotes analyte observed in associated method blank or digestion blank. Analyte concentration should be considered as estimated.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).
- U Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.
- * Value not within control limits.

SAMPLE CHAIN OF CUSTODY

Pace Analytical*

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed 12100362P1>

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GC - PCB



Job Number: 12100362

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-13

Lab Sample ID: 12100362-01 (AP33172)

Collection Date: 10/19/2012 15:22

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

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Bate	ch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23	3F-1070-9	SW-846 Method 8082	10/30/2012 13:13	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20538	8	EPA 3535	10/24/2012 09:50	EPC	1020 mL	10.0 mL	NA
Analyte		CAS No.	Result (ug/L)	PQL	Dilution Fact	or Flags	File ID
Aroclor 1016		12674-11-2	ND	0.0500	1.00	U	GC23F-1070-9
Aroclor 1221		11104-28-2	ND	0.0500	1.00	U	GC23F-1070-9
Aroclor 1232		11141-16-5	ND	0.0500	1.00	U	GC23F-1070-9
Aroclor 1242		53469-21-9	ND	0.0500	1.00	U	GC23F-1070-9
Aroclor 1248		12672-29-6	0.470	0.0500	1.00	PE	GC23F-1070-9
Aroclor 1254		11097-69-1	ND	0.0500	1.00	U	GC23F-1070-9
Aroclor 1260		11096-82-5	ND	0.0500	1.00	U	GC23F-1070-9
Total PCB Amount	:	1336-36-3	0.470		1.00		GC23F-1070-9
				Lin	nits		
Surrogate		CAS No.	% Recovery	(%		${\bf Q}^1$	File ID
Tetrachloro-meta-xv	ylene	877-09-8	86.6	60.0-	-140		GC23B-1079-9
Decachlorobipheny	ıl .	2051-24-3	93.5	60.0	-140		GC23B-1079-9
Tetrachloro-meta-x	ylene	877-09-8	88.2	60.0	-140		GC23F-1070-9
Decachlorobipheny		2051-24-3	101	60.0	-140		GC23F-1070-9
Qualifier column where '	'*' denotes	value outside the control limits or 'D' o	lenotes value was diluted out.				<u> </u>

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100362

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-10

Lab Sample ID: 12100362-02 (AP33173)

Collection Date: 10/19/2012 16:47

Sample Matrix: WATER

Received Date: 10/22/2012 08:03

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1070-	10 SW-846 Method 8082	10/30/2012 13:46	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20538	EPA 3535	10/24/2012 09:50	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-10
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-10
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-10
Aroclor 1242	53469-21-9	0.243	0.0500	1.00	AD	GC23F-1070-10
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-10
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-10
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-10
Total PCB Amount	1336-36-3	0.243		1.00		GC23F-1070-10
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	85.1	60.0	-140		GC23B-1079-10
Decachlorobiphenyl	2051-24-3	91.7	60.0	-140		GC23B-1079-10
Tetrachloro-meta-xylene	877-09-8	90.8	60.0	-140		GC23F-1070-10
Decachlorobiphenyl	2051-24-3	104	60.0	-140		GC23F-1070-10
Qualifier column where '*' denote	s value outside the control limits or 'D'	denotes value was diluted out.				

ND: Denotes analyte not detected at a concentration greater than the PQL.

 $PQL\ (Practical\ Quantitation\ Limit).\ Denotes\ lowest\ analyte\ concentration\ reportable\ for\ the\ sample.$

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

Quality Control Samples (Lab)



Quality Control Results Method Blank

Job Number: 12100362

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33172B)

Lab Sample ID: PBLK-83

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23B-1079-	7 SW-846 Method 8082	10/30/2012 12:08	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20538	EPA 3535	10/24/2012 09:50	EPC	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23B-1079-7
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23B-1079-7
Total PCB Amount	1336-36-3	ND		1.00	U	GC23B-1079-7
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	85.0	60.0	-140		GC23B-1079-7
Decachlorobiphenyl	2051-24-3	86.2	60.0	-140		GC23B-1079-7

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Method Blank

Job Number: 12100362

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC **Project:** JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33172B)

Lab Sample ID: PBLK-83

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1070	-7 SW-846 Method 8082	10/30/2012 12:08	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20538	EPA 3535	10/24/2012 09:50	EPC	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	r Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-7
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-7
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1070-7
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	88.0	60.0	-140		GC23F-1070-7
Decachlorobiphenyl	2051-24-3	94.7	60.0	-140		GC23F-1070-7

¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100362

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33172L)

Lab Sample ID: LCS-83

(
	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23B-1079-8	SW-846 Method 8082	10/30/2012 12:40	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 µm
Pren 1:	20538	EPA 3535	10/24/2012 09:50	EPC	1000 mL	10.0 mL	NA

Analyte Spiked	CAS No.	Added (ug/L)	LCS (ug/L)	LCS % Rec.	Q Limit
Aroclor 1221	11104-28-2	0.500	0.454	90.7	70.0-13

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits		
Surrogate	CAS No.	% Recovery	(%)	$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	85.3	60.0-140	(GC23B-1079-8
Decachlorobiphenyl	2051-24-3	92.7	60.0-140	(GC23B-1079-8

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100362

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33172L)

Lab Sample ID: LCS-83

1							
l	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23F-1070-8	SW-846 Method 8082	10/30/2012 12:40	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20538	EPA 3535	10/24/2012 09:50	EPC	1000 mL	10.0 mL	NA

		Added	LCS	LCS	Limits	
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	Q' (%)	
Aroclor 1221	11104-28-2	0.500	0.461	92.2	70.0-130	

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits	
Surrogate	CAS No.	% Recovery	(%)	Q ¹ File ID
Tetrachloro-meta-xylene	877-09-8	85.1	60.0-140	GC23F-1070-8
Decachlorobiphenyl	2051-24-3	97.7	60.0-140	GC23F-1070-8

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Pace Analytical e-Report

Report prepared for:

THE JOHNSON COMPANY, INC 100 STATE ST SUITE 600 MONTPELIER, VT 05602 CONTACT: DAN BASTON

Project ID: JARD - BENNINGTON VT

Sampling Date(s): October 17, 2012, October 18, 2012, October 19,

2012

Lab Report ID: 12100343

Client Service Contact: James Wickham (518) 346-4592

Analysis Included: PCB Analysis (Water)

Test results meet all National Environmental Laboratory Accreditation Conference (NELAC) requirements unless noted in the case narrative. The results contained within this document relate only to the samples included in this report. Pace Analytical is respondible only for the certified testing and is not directly responsible for the integrity of the sample before laboratory receipt. This report shall not be reproduced, except in full, without the written consent of Pace Analytical Services, Inc.

Jan Pfelger

Dan Pfalzer Laboratory Director



Certifications: NYS (EPA: NY00906, ELAP: 11078), NJ (NY026), CT (PH-0337), MA(M-NY906), NC (668)

Pace Analytical Services, Inc. | 2190 Technology Drive | Schenectady, NY 12308 Phone: 518.346.4592 | internet: www.pacelabs.com This page intentionally left blank.

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Section 5: Quality Control Samples (Lab)	.3(

CASE NARRATIVE

CASE NARRATIVE

This data package (SDG ID: 12100343) consists of 17 water samples received on 10/19/2012. The samples are from Project Name: JARD - BENNINGTON VT.

This sample delivery group consists of the following samples:

Client ID	Collection Date
EPA- 1065	10/17/2012 17:36
EPA- 108D	10/18/2012 08:48
EPA- 108S	10/18/2012 08:48
EPA-107	10/18/2012 17:31
EPA- 106D	10/18/2012 17:52
EPA- 105	10/18/2012 15:38
EPA- 104D	10/18/2012 10:27
EPA- 104S	10/18/2012 10:20
EPA- 103	10/18/2012 12:21
EPA- 102	10/18/2012 12:27
PZ- 20	10/18/2012 14:20
MW- 8	10/19/2012 09:36
MW- 9	10/19/2012 11:06
MW-9D	10/19/2012 13:22
MW- D1	10/19/2012 14:26
MW- 11	10/19/2012 09:33
EPA- 101	10/19/2012 12:21
	EPA- 1065 EPA- 108D EPA- 108S EPA-107 EPA- 106D EPA- 105 EPA- 104D EPA- 104S EPA- 103 EPA- 102 PZ- 20 MW- 8 MW- 9 MW- 9D MW- D1 MW- 11

Sample Delivery and Receipt Conditions

- (1.) Lab provided sample pickup service on 10/19/2012.
- (2.) All samples were received at the laboratory intact and within holding times.
- (3.) The following cooler temperatures were recorded at sample receipt (Control limits are between 0-6 Degrees Celsius): 0.5, 0.7, 1.0 degrees Celsius. Please see Chain of Custody for details.

PCB Aroclor Analysis

Analysis for PCB Aroclors was performed by method SW-846 8082A using a dual column GC system. Samples were extracted by USEPA SW-846 Method 3535 Solid Phase Extraction. One-liter water samples were extracted by NEA-PACE SOP NE178_04. The following technical and administrative items were noted for the analysis:

- (1.) The concentration results for Aroclor 1242 were flagged (AD) to denote that an altered Aroclor pattern was observed. Please see certificate of analysis for details.
- (2.) The concentration result for Aroclor 1221 was flagged (PB) to denote that Aroclor 1221 is being used to quantify an altered Aroclor pattern. Actual Aroclor 1221 was not presumed to be present in the sample(s). Please see associated certificate of analysis for details.

- (3.) The concentration result for Aroclor 1248 was flagged (PE) to denote that Aroclor 1248 is being used to quantify an altered Aroclor pattern. Actual Aroclor 1248 was not presumed to be present in the sample(s). Please see associated certificate of analysis for details.
- (4.) The surrogates DCBP and TCMX were diluted out for (LAB ID: AP33045) due to the high concentration of PCB in the samples. Please see associated certificate of analysis for details.

Respectfully submitted,

DAMES DERNAL

James T. Wickham Client Services Manager

QUALIFIERS

Organic Laboratory Qualifiers Defined

- B Denotes analyte observed in associated method blank or extraction blank. Analyte concentration should be considered as estimated.
- D Surrogate was diluted out. The analysis of the sample required a dilution such that the surrogate concentration was diluted below the laboratory acceptance criteria.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).
- P Indicates relative percent difference (RPD) between primary and secondary GC column analysis exceeds 40 % or indicates percent difference (PD) between primary and secondary GC column analysis exceeds 25 %.
- U Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.
- Z Chromatographic interference due to PCB co-elution.
- * Value not within control limits.

Inorganic Laboratory Qualifiers Defined

- B Denotes analyte observed in associated method blank or digestion blank. Analyte concentration should be considered as estimated.
- E Denotes analyte concentration exceeded calibration range of instrument. Sample could not be re-analyzed at secondary dilution due to insufficient sample amount, quick turn-around request, sample matrix interference or hold time excursion. Concentration result should be considered as estimated.
- J Denotes an estimated concentration. The concentration result is greater than or equal to the Method Detection Limit (MDL) but less than the Reporting Limit (RL).
- U Denotes analyte not detected at concentration greater than or equal to the RL. RL's are adjusted for sample weight/volume and dilution factors.
- * Value not within control limits.

SAMPLE CHAIN OF CUSTODY



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

www.pacetags.com				•		
Section A Required Client Information: Section B Required Project Information	on:		00343P1>		Page:	of 2
Company: The Johnson Command Report To: Don't		Invoice Information: Attention:		1		
100 State Street Suttable 100	Nocolo 11	Company Name: 121003431				1589945
Mantrolles It 05702		Address:		REGULATORY AG		
Email To: DPBQ JCOMAIL, COM Purchase Order No.: 3	-2218-5	Pace Quote		(cross	GROUND W	ATER DRINKING WATER
	RD	Reference: Pace Project		Series Construction of the Construction	RCRA	OTHER
Project Number:	2218-5	Manager: Pace Profile #:		Site Location	T	
			Requested	STATE: Analysis Filtered (Y	<u> </u>	
Section D Required Client Information MATRIX / CODE Required Client Information	COLLECTED		Z N	maysis i intered (i)		
Required Client Information MATRIX / CODE (4) 0 0 0 0 0 0 0 0 0		Preservatives	X IV			
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1 EPA - 1065 WT6	10/17/12/1736	21	- 		, a	. doo i toject No./ Lab 1.D.
2 EPA- 108 D WT 6		2//				AP33032
3 EPA-108S WTG	10/18/12/0848/13	2//				AP33033
		2 1/1	X			AP33034 AP33035
1500 100 = 500	10/8/2 1752 12	2//	X			AP33036
7 EPA-104D WIG		2//	X			AP33037
8 EPA - 1045 NTG		3 1	X			AP33038
9 EVA-103	10/8/12/020 4 3	2 //	X			AP33039
0 EPA-102 MG		2 //	X	<u> </u>		AP33040
1 PZ-20 NTG		2//	S I			AP33041
2				++++	++1	AP33042
ADDITIONAL COMMENTS RELINQUISHED B		TIME ACCEPTED B	Y / AFFILIATION	DATE TIME		CALLOU
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camples for homologanologs Her receipt of Aroclar results Xtract and hold ORIGINAL	SAMPLER NAME AND SIGNATURE					
stract and hold original	PRINT Name of SAMPLER:				ပ္	l on (4)
For Method (080 Samples)		Daniel Baston	DATE S		remp in	Received on Ice (Y/N) Custody Sealed Cooler (Y/N) Samples Intact (Y/N)
"Important Note: By signing this form you are adcepting Pace's NET 30 day payment terms	SIGNATURE of SAMPLER:	Val Am	DATE Signed (MM/DD/YY):	119/12] je	Rec Ic Sealt



CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

www.pacelabs.com				are area and an area area.	
Required Client Information:	Section B Required Project Information:		Section C <12100343P2>		Page: a of a
Company: The Junison Company R	Report To: Danke 1 Bouston		Invoice Information: Attention:	7	
Address: 100 Stalk St, Suitele00 Company Montpelier, VT ascer Email To: D/BC SC CMAIL COM PL	Copy To:		Company Name: 121 903 432	DECULATORY 4 05	1589941
MONTPELIEY, UT CSUCE			Address:	REGULATORY AGE	
Phone: DASC JC CMAIL COM PU	urchase Order No.: 3-2218-5		Pace Quote Reference:	(inequ)	ROUND WATER DRINKING WATER
Phone: 802 - 229 - 4600 Fax: 229 - 5876 Pro	ONKU		Pace Project Manager:	Site Location	CRA OTHER
Requested Due Date/TAT:	roject Number: 3-2218-5		Pace Profile #:	STATE:	r l
Section D Matrix Code			Requested	Analysis Filtered (Y/N	
Required Client Information MATRIX / COL	DDE GOLLECTE DW S S S S S S S S S S S S S S S S S S S		Preservatives > N		
Waste Water Product Soil/Solid Oil Wine	WW DITER START E	OMPOSITE ON	280		Contact JCO E IF EPA-10!
	AR AR COO ST SAMPLE TIME DATE	PLE TEMP AT	# OF CONTAINERS Unpreserved H ₂ SO ₄ HNO ₃ HCI NaOH Na ₂ S ₂ O ₃ Methanol Other LAnalysis Test L		Contact JCO if EPA-101 requires filtrat for proper analyse (high turbid.)
1 MW-8	DATE TIME DATE	. 400			Pace Project No./ Lab I.D.
2 MW-9D 3 MW-9D	WT G I I I I I I I I I I I I I I I I I I	112 11CCe 16	2/1	++++	AP33043
3 MW-9D	WT Gr (cha)	12 1322 15		++++	AP33044
4 MW-D1 5 MW-II	WT G 10/19	12/26/15 -		++++	AP33045 AP33046
6 EPA-101	WT G 10/19	1/2 12/26 15 - 1/2 0933 15 3	2 0	+++++	HY33046
7	WI G 16/16	17 121 5 3			AP33047 AP33048
8					HI 53048
9					
0		+	++++++		
11			++++++		
2			++++++		
ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME ACCEPTED BY / AFFILIATION		
Retain samples fer hunding	Del May	10/19/12 1	WIO WIO	DATE TIME	SAMPLE CONDITIONS
malysis, JCO to determine		36 10 12 1	40	10-19-12 14 40	0.5 Y N Y
amples for homologanalysis		10-19-12 10	65- Chill Couls	101912 16:15	0.7 Y N Y
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extract and haid Fex	SAMPLER NAME A	AND SIGNATURE			
extract and hold Fer Method Ceso Samples Origin	INIAI				act oou
	SIGNATUR	me of SAMPLER:	Daniel Bastan DATE Signed		Temp in °C Received on Ice (Y/N) Custody Sealed Cooler (Y/N)
*Important Note: By signing this form you are accepting Pace's	's NET 30 day payment terms and agreeing to late charge	es of 1.5% per month or	MM/DD/YY): 10	/19/12	
Pace Analytical Services Inc	·	12	2100343		F-ALL-Q-020rev.07, 15-May-2007ge 11 of 34

GC - PCB



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Collection Date: 10/17/2012 17:36

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 1065

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Lab Sample ID: 12100343-01 (AP33032) **Percent Solid:** N/A

Analyte		CAS No	Result (ug/L)	POL	Dilution Fac	tor Flags	File ID
Prep 1:	20520	EPA 3535	10/23/2012 09:40	EPC	1040 mL	10.0 mL	NA
Analysis 1:	GC23F-1070-37	SW-846 Method 8082	10/31/2012 04:31	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column

Analyte	CAS No.	Result (ug/L)	PQL	Dilution Factor	Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-37
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-37
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-37
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-37
Aroclor 1248	12672-29-6	0.305	0.0500	1.00	PE	GC23F-1070-37
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-37
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-37
Total PCB Amount	1336-36-3	0.305		1.00		GC23F-1070-37

			Limits	
Surrogate	CAS No.	% Recovery	(%)	Q ¹ File ID
Tetrachloro-meta-xylene	877-09-8	95.7	60.0-140	GC23F-1070-37
Decachlorobiphenyl	2051-24-3	107	60.0-140	GC23F-1070-37
Tetrachloro-meta-xylene	877-09-8	98.2	60.0-140	GC23B-1079-37
Decachlorobiphenyl	2051-24-3	104	60.0-140	GC23B-1079-37

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

 $PQL\ (Practical\ Quantitation\ Limit).\ Denotes\ lowest\ analyte\ concentration\ reportable\ for\ the\ sample.$

PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 108D

Lab Sample ID: 12100343-02 (AP33033)

Collection Date: 10/18/2012 08:48

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1072-1	7 SW-846 Method 8082	11/01/2012 20:12	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1072-17
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1072-17
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1072-17
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1072-17
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1072-17
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1072-17
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1072-17
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1072-17
			Lin	nite		
Surrogate	CAS No.	% Recovery	(%		$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	86.3	60.0	-140		GC23F-1072-17
Decachlorobiphenyl	2051-24-3	91.2	60.0	-140		GC23F-1072-17
Tetrachloro-meta-xylene	877-09-8	86.7	60.0	-140		GC23B-1081-17
Decachlorobiphenyl	2051-24-3	87.2	60.0	-140		GC23B-1081-17
Qualifier column where '*' denote:	s value outside the control limits or 'D'	denotes value was diluted out	t.		•	_

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 108S

Lab Sample ID: 12100343-03 (AP33034)

Collection Date: 10/18/2012 08:48

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

				•		
Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1070-4	40 SW-846 Method 8082	10/31/2012 06:09	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-40
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-40
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-40
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-40
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-40
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-40
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-40
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1070-40
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	89.6	60.0	-140		GC23F-1070-40
Decachlorobiphenyl	2051-24-3	101	60.0	-140		GC23F-1070-40
Tetrachloro-meta-xylene	877-09-8	90.0	60.0	-140		GC23B-1079-40
Decachlorobiphenyl	2051-24-3	95.9		-140		GC23B-1079-40
¹ Qualifier column where '*' denote	s value outside the control limits or 'D'	denotes value was diluted out.		•	•	

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: EPA-107

Lab Sample ID: 12100343-04 (AP33035)

Collection Date: 10/18/2012 17:31

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

D (1.17)	M 4 1	D.	A 1	T '4 3374 /37 1	E' 137 1	0.1	
Batch ID		Date	Analyst	Init Wt./Vol.	Final Vol.	Column	
Analysis 1: GC23F-1070-	-41 SW-846 Method 8082	10/31/2012 06:41	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm	
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1020 mL	10.0 mL	NA	
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID	
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-41	
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-41	
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-41	
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-41	
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-41	
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-41	
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-41	
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1070-41	
			Lin	nits			
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID	
Tetrachloro-meta-xylene	877-09-8	104	60.0	-140		GC23F-1070-41	
Decachlorobiphenyl	2051-24-3	116	60.0	-140		GC23F-1070-41	
Tetrachloro-meta-xylene	877-09-8	107	60.0	-140		GC23B-1079-41	
Decachlorobiphenyl	2051-24-3	112	60.0	-140		GC23B-1079-41	
Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.							

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 106D

Lab Sample ID: 12100343-05 (AP33036)

Collection Date: 10/18/2012 17:52

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column	
Analysis 1: GC23F-1070-4	12 SW-846 Method 8082	10/31/2012 07:14	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm	
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1080 mL	10.0 mL	NA	
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Fact	tor Flags	File ID	
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-42	
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-42	
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-42	
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-42	
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-42	
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-42	
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-42	
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1070-42	
				nits	1		
Surrogate	CAS No.	% Recovery	(%	(o)	$\mathbf{Q}^{\scriptscriptstyle 1}$	File ID	
Tetrachloro-meta-xylene	877-09-8	86.1	60.0	-140		GC23F-1070-42	
Decachlorobiphenyl	2051-24-3	97.3	60.0	-140		GC23F-1070-42	
Tetrachloro-meta-xylene	877-09-8	88.2	60.0	-140		GC23B-1079-42	
Decachlorobiphenyl	2051-24-3	93.6		-140		GC23B-1079-42	
Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.							

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 105

Lab Sample ID: 12100343-06 (AP33037)

Collection Date: 10/18/2012 15:38

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column		
Analysis 1: GC23F-1070-4	13 SW-846 Method 8082	10/31/2012 07:47	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm		
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1000 mL	10.0 mL	NA		
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID		
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-43		
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-43		
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-43		
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-43		
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-43		
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-43		
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-43		
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1070-43		
			Lin	nits				
Surrogate	CAS No.	% Recovery	(%	(o)	$\mathbf{Q}^{^{1}}$	File ID		
Tetrachloro-meta-xylene	877-09-8	92.4	60.0	-140		GC23F-1070-43		
Decachlorobiphenyl	2051-24-3	109	60.0	-140		GC23F-1070-43		
Tetrachloro-meta-xylene	877-09-8	98.7	60.0	-140		GC23B-1079-43		
Decachlorobiphenyl	2051-24-3	108		-140		GC23B-1079-43		
¹ Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.								

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 104D

Lab Sample ID: 12100343-07 (AP33038)

Collection Date: 10/18/2012 10:27

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch	ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column	
Analysis 1: GC23F-1		SW-846 Method 8082	10/31/2012 08:19	Allaryst	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 µm	
1	0/0-44		10/31/2012 08:19	EPC	1080 mL	10.0 mL		
Prep 1: 20520		EPA 3535	10/23/2012 09:40	EPC	1080 mL	10.0 mL	NA	
Analyte		CAS No.	Result (ug/L)	PQL	Dilution Fact	tor Flags	File ID	
Aroclor 1016		12674-11-2	ND	0.0500	1.00	U	GC23F-1070-44	
Aroclor 1221		11104-28-2	0.380	0.0500	1.00	PB	GC23F-1070-44	
Aroclor 1232		11141-16-5	ND	0.0500	1.00	U	GC23F-1070-44	
Aroclor 1242		53469-21-9	0.554	0.0500	1.00	AD	GC23F-1070-44	
Aroclor 1248		12672-29-6	ND	0.0500	1.00	U	GC23F-1070-44	
Aroclor 1254		11097-69-1	ND	0.0500	1.00	U	GC23F-1070-44	
Aroclor 1260		11096-82-5	ND	0.0500	1.00	U	GC23F-1070-44	
Total PCB Amount		1336-36-3	0.934		1.00		GC23F-1070-44	
				Lin	nits			
Surrogate		CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID	
Tetrachloro-meta-xyler	ne	877-09-8	85.2	60.0	-140		GC23F-1070-44	
Decachlorobiphenyl		2051-24-3	99.6	60.0	-140		GC23F-1070-44	
Tetrachloro-meta-xyler	ne	877-09-8	93.8	60.0	-140		GC23B-1079-44	
Decachlorobiphenyl		2051-24-3	95.9	60.0	-140		GC23B-1079-44	
Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.								

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 104S

Lab Sample ID: 12100343-08 (AP33039)

Collection Date: 10/18/2012 10:20

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Datah ID	Mathad	Data	A a 1a4	In:4 W/4 /V/a1	Einal Wal	Column
Batch ID	Method	Date	Analyst		Final Vol.	Column
Analysis 1: GC23F-1070-		10/31/2012 08:52	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1020 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-45
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-45
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-45
Aroclor 1242	53469-21-9	0.292	0.0500	1.00	AD	GC23F-1070-45
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-45
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-45
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-45
Total PCB Amount	1336-36-3	0.292		1.00		GC23F-1070-45
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		${\bf Q}^1$	File ID
Tetrachloro-meta-xylene	877-09-8	88.6	60.0	-140		GC23F-1070-45
Decachlorobiphenyl	2051-24-3	98.3	60.0	-140		GC23F-1070-45
Tetrachloro-meta-xylene	877-09-8	94.9	60.0	-140		GC23B-1079-45
Decachlorobiphenyl	2051-24-3	95.4	60.0	-140		GC23B-1079-45
Qualifier column where '*' denote	es value outside the control limits or 'D'	denotes value was diluted out.				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.



Job Number: 12100343

Pace Analytical Services, Inc.

GC23F-1072-18

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Collection Date: 10/18/2012 12:21

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 103

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Lab Sample ID: 12100343-09 (AP33040) **Percent Solid:** N/A

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23F-1072-18	SW-846 Method 8082	11/01/2012 20:44	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20520	EPA 3535	10/23/2012 09:40	EPC	1080 mL	10.0 mL	NA
Analyte		CAS No.	Result (ug/L)	PQL	Dilution Fact	or Flags	File ID
Aroclor 1016		12674-11-2	ND	0.0500	1.00	U	GC23F-1072-18
Aroclor 1221		11104-28-2	ND	0.0500	1.00	U	GC23F-1072-18
Aroclor 1232		11141-16-5	ND	0.0500	1.00	U	GC23F-1072-18
Aroclor 1242		53469-21-9	ND	0.0500	1.00	U	GC23F-1072-18
Aroclor 1248		12672-29-6	ND	0.0500	1.00	U	GC23F-1072-18
Aroclor 1254		11097-69-1	ND	0.0500	1.00	U	GC23F-1072-18
Aroclor 1260		11096-82-5	ND	0.0500	1.00	U	GC23F-1072-18

			Limits	
Surrogate	CAS No.	% Recovery	(%)	Q ¹ File ID
Tetrachloro-meta-xylene	877-09-8	84.1	60.0-140	GC23F-1072-18
Decachlorobiphenyl	2051-24-3	82.7	60.0-140	GC23F-1072-18
Tetrachloro-meta-xylene	877-09-8	85.9	60.0-140	GC23B-1081-18
Decachlorobiphenyl	2051-24-3	79.1	60.0-140	GC23B-1081-18

1.00

U

ND

1336-36-3

Total PCB Amount

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100343

Pace Analytical Services, Inc.

GC23B-1079-47

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Collection Date: 10/18/2012 12:27

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 102

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Lab Sample ID: 12100343-10 (AP33041) **Percent Solid:** N/A

Batch	ID Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1	070-47 SW-846 Method 8082	10/31/2012 09:57	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1070-47
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1070-47
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1070-47
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1070-47
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1070-47
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1070-47
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1070-47
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1070-47
			Lin	nite		
Surrogata	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID
Surrogate				<u>′</u>	<u> </u>	
Tetrachloro-meta-xyle	ne 877-09-8	87.2	60.0	-140		GC23F-1070-47
Decachlorobiphenyl	2051-24-3	93.2	60.0	-140		GC23F-1070-47
Tetrachloro-meta-xyle	ne 877-09-8	88.2	60.0	-140		GC23B-1079-47

60.0-140

Decachlorobiphenyl 2051-24-3 88.7

Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: PZ-20

Lab Sample ID: 12100343-11 (AP33042)

Collection Date: 10/18/2012 14:20

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1071-	2 SW-846 Method 8082	10/31/2012 12:22	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1050 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Fact	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1071-2
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1071-2
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1071-2
Aroclor 1242	53469-21-9	0.397	0.0500	1.00	AD	GC23F-1071-2
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1071-2
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1071-2
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1071-2
Total PCB Amount	1336-36-3	0.397		1.00		GC23F-1071-2
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	$\mathbf{Q}^{\scriptscriptstyle 1}$	File ID
Tetrachloro-meta-xylene	877-09-8	96.2	60.0	-140		GC23F-1071-2
Decachlorobiphenyl	2051-24-3	100	60.0	-140		GC23F-1071-2
Tetrachloro-meta-xylene	877-09-8	101	60.0	-140		GC23B-1080-2
Decachlorobiphenyl	2051-24-3	95.1		-140		GC23B-1080-2
Qualifier column where '*' denote	es value outside the control limits or 'D'	denotes value was diluted out				•

Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted ou

ND: Denotes analyte not detected at a concentration greater than the PQL.

 $PQL\ (Practical\ Quantitation\ Limit).\ Denotes\ lowest\ analyte\ concentration\ reportable\ for\ the\ sample.$

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-8

Lab Sample ID: 12100343-12 (AP33043)

Collection Date: 10/19/2012 09:36

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1072-1	19 SW-846 Method 8082	11/01/2012 21:17	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1020 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.200	4.00	U	GC23F-1072-19
Aroclor 1221	11104-28-2	ND	0.200	4.00	U	GC23F-1072-19
Aroclor 1232	11141-16-5	ND	0.200	4.00	U	GC23F-1072-19
Aroclor 1242	53469-21-9	1.94	0.200	4.00	AD	GC23F-1072-19
Aroclor 1248	12672-29-6	ND	0.200	4.00	U	GC23F-1072-19
Aroclor 1254	11097-69-1	ND	0.200	4.00	U	GC23F-1072-19
Aroclor 1260	11096-82-5	ND	0.200	4.00	U	GC23F-1072-19
Total PCB Amount	1336-36-3	1.94		4.00		GC23F-1072-19
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	${\bf Q}^1$	File ID
Tetrachloro-meta-xylene	877-09-8	90.9	60.0	-140		GC23F-1072-19
Decachlorobiphenyl	2051-24-3	99.7	60.0	-140		GC23F-1072-19
Tetrachloro-meta-xylene	877-09-8	92.6	60.0	-140		GC23B-1081-19
Decachlorobiphenyl	2051-24-3	95.0	60.0	-140		GC23B-1081-19
Qualifier column where '*' denote:	s value outside the control limits or 'D'	denotes value was diluted out				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-9

Lab Sample ID: 12100343-13 (AP33044)

Collection Date: 10/19/2012 11:06

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column		
Analysis 1: GC23F-1072-2	0 SW-846 Method 8082	11/01/2012 21:50	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm		
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1020 mL	10.0 mL	NA		
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID		
Aroclor 1016	12674-11-2	ND	0.200	4.00	U	GC23F-1072-20		
Aroclor 1221	11104-28-2	ND	0.200	4.00	U	GC23F-1072-20		
Aroclor 1232	11141-16-5	ND	0.200	4.00	U	GC23F-1072-20		
Aroclor 1242	53469-21-9	ND	0.200	4.00	U	GC23F-1072-20		
Aroclor 1248	12672-29-6	1.90	0.200	4.00	PE	GC23F-1072-20		
Aroclor 1254	11097-69-1	ND	0.200	4.00	U	GC23F-1072-20		
Aroclor 1260	11096-82-5	ND	0.200	4.00	U	GC23F-1072-20		
Total PCB Amount	1336-36-3	1.90		4.00		GC23F-1072-20		
			Lin	nits				
Surrogate	CAS No.	% Recovery	(%	(o)	\mathbf{Q}^1	File ID		
Tetrachloro-meta-xylene	877-09-8	86.0	60.0	-140		GC23F-1072-20		
Decachlorobiphenyl	2051-24-3	96.6	60.0	-140		GC23F-1072-20		
Tetrachloro-meta-xylene	877-09-8	91.3	60.0	-140		GC23B-1081-20		
Decachlorobiphenyl	2051-24-3	89.7		-140		GC23B-1081-20		
¹ Qualifier column where '*' denotes	Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.							

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-9D

Lab Sample ID: 12100343-14 (AP33045)

Collection Date: 10/19/2012 13:22

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID		Date	Analyst		Final Vol.	Column	
Analysis 1: GC23F-1072-		11/01/2012 22:23	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μ m	
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1080 mL	10.0 mL	NA	
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID	
Aroclor 1016	12674-11-2	ND	1.50	30.0	U	GC23F-1072-21	
Aroclor 1221	11104-28-2	11.6	1.50	30.0	PB	GC23F-1072-21	
Aroclor 1232	11141-16-5	ND	1.50	30.0	U	GC23F-1072-21	
Aroclor 1242	53469-21-9	12.4	1.50	30.0	AD	GC23F-1072-21	
Aroclor 1248	12672-29-6	ND	1.50	30.0	U	GC23F-1072-21	
Aroclor 1254	11097-69-1	ND	1.50	30.0	U	GC23F-1072-21	
Aroclor 1260	11096-82-5	ND	1.50	30.0	U	GC23F-1072-21	
Total PCB Amount	1336-36-3	24.0		30.0		GC23F-1072-21	
			Lin	nits			
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID	
Tetrachloro-meta-xylene	877-09-8	109	60.0	-140	D	GC23F-1072-21	
Decachlorobiphenyl	2051-24-3	119	60.0	-140	D	GC23F-1072-21	
Tetrachloro-meta-xylene	877-09-8	108	60.0	-140	D	GC23B-1081-21	
Decachlorobiphenyl	2051-24-3	95.6	60.0	-140	D	GC23B-1081-21	
Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.							

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

AD-Aroclor 1242 is being reported as the best Aroclor match. The sample exhibits an altered PCB pattern.

PB-Aroclor 1221 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1221 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW- D1

Lab Sample ID: 12100343-15 (AP33046)

Collection Date: 10/19/2012 14:26

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

	·					
Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23B-1081-	-23 SW-846 Method 8082	11/01/2012 23:28	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1080 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.200	4.00	U	GC23B-1081-23
Aroclor 1221	11104-28-2	ND	0.200	4.00	U	GC23B-1081-23
Aroclor 1232	11141-16-5	ND	0.200	4.00	U	GC23B-1081-23
Aroclor 1242	53469-21-9	ND	0.200	4.00	U	GC23B-1081-23
Aroclor 1248	12672-29-6	1.97	0.200	4.00	PE	GC23B-1081-23
Aroclor 1254	11097-69-1	ND	0.200	4.00	U	GC23B-1081-23
Aroclor 1260	11096-82-5	ND	0.200	4.00	U	GC23B-1081-23
Total PCB Amount	1336-36-3	1.97		4.00		GC23B-1081-23
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%		$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	87.4	60.0	-140		GC23F-1072-23
Decachlorobiphenyl	2051-24-3	100	60.0	-140		GC23F-1072-23
Tetrachloro-meta-xylene	877-09-8	97.0	60.0	-140		GC23B-1081-23
Decachlorobiphenyl	2051-24-3	95.4	60.0	-140		GC23B-1081-23
Qualifier column where '*' denote	es value outside the control limits or 'D'	denotes value was diluted out				

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: MW-11

Lab Sample ID: 12100343-16 (AP33047)

Collection Date: 10/19/2012 09:33

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column		
Analysis 1: GC23F-1071-7	7 SW-846 Method 8082	10/31/2012 15:05	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm		
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1080 mL	10.0 mL	NA		
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID		
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1071-7		
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1071-7		
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1071-7		
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1071-7		
Aroclor 1248	12672-29-6	0.176	0.0500	1.00	PE	GC23F-1071-7		
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1071-7		
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1071-7		
Total PCB Amount	1336-36-3	0.176		1.00		GC23F-1071-7		
			Lin	nits				
Surrogate	CAS No.	% Recovery	(%	(o)	\mathbf{Q}^1	File ID		
Tetrachloro-meta-xylene	877-09-8	88.7	60.0	-140		GC23F-1071-7		
Decachlorobiphenyl	2051-24-3	100	60.0	-140		GC23F-1071-7		
Tetrachloro-meta-xylene	877-09-8	90.5	60.0	-140		GC23B-1080-7		
Decachlorobiphenyl	2051-24-3	96.3		-140		GC23B-1080-7		
Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.								

ND: Denotes analyte not detected at a concentration greater than the PQL. PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

PE-Aroclor 1248 is being used to report an altered PCB pattern exhibited by the sample. Actual Aroclor 1248 is not present in the sample, but is reported to more accurately quantify PCB present in sample that has undergone environmental alteration.



Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC

Project: JARD - BENNINGTON VT

Client Sample ID: EPA- 101

Lab Sample ID: 12100343-17 (AP33048)

Collection Date: 10/19/2012 12:21

Sample Matrix: WATER

Received Date: 10/19/2012 16:15

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column	
Analysis 1: GC23F-1071-8	8 SW-846 Method 8082	10/31/2012 15:38	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm	
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	980 mL	10.0 mL	NA	
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID	
Aroclor 1016	12674-11-2	ND	0.0510	1.00	U	GC23F-1071-8	
Aroclor 1221	11104-28-2	ND	0.0510	1.00	U	GC23F-1071-8	
Aroclor 1232	11141-16-5	ND	0.0510	1.00	U	GC23F-1071-8	
Aroclor 1242	53469-21-9	ND	0.0510	1.00	U	GC23F-1071-8	
Aroclor 1248	12672-29-6	ND	0.0510	1.00	U	GC23F-1071-8	
Aroclor 1254	11097-69-1	ND	0.0510	1.00	U	GC23F-1071-8	
Aroclor 1260	11096-82-5	ND	0.0510	1.00	U	GC23F-1071-8	
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1071-8	
			Lin	nits			
Surrogate	CAS No.	% Recovery	(%		\mathbf{Q}^1	File ID	
Tetrachloro-meta-xylene	877-09-8	86.4	60.0-140			GC23F-1071-8	
Decachlorobiphenyl	2051-24-3	107	60.0	-140		GC23F-1071-8	
Tetrachloro-meta-xylene			GC23B-1080-8				
Decachlorobiphenyl	2051-24-3	101	60.0-140			GC23B-1080-8	
1 Qualifier column where '*' denote	s value outside the control limits or 'D'	denotes value was diluted out.					

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

Quality Control Samples (Lab)



Quality Control Results Method Blank

Job Number: 12100343

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33032BRR1)

Lab Sample ID: PBLK-69

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23B-1081-1	16 SW-846 Method 8082	11/01/2012 19:39	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Facto	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23B-1081-16
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23B-1081-16
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23B-1081-16
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23B-1081-16
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23B-1081-16
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23B-1081-16
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23B-1081-16
Total PCB Amount	1336-36-3	ND		1.00	U	GC23B-1081-16
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	$\mathbf{Q}^{^{1}}$	File ID
Tetrachloro-meta-xylene	877-09-8	81.8	60.0	-140		GC23B-1081-16
Decachlorobiphenyl	2051-24-3	88.5	60.0	-140		GC23B-1081-16

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Method Blank

Job Number: 12100343

Pace Analytical Services, Inc. 2190 Technology Drive

Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Method Blank (AP33032BRR1)

Lab Sample ID: PBLK-69

Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1: GC23F-1072-	16 SW-846 Method 8082	11/01/2012 19:39	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1: 20520	EPA 3535	10/23/2012 09:40	EPC	1000 mL	10.0 mL	NA
Analyte	CAS No.	Result (ug/L)	PQL	Dilution Factor	or Flags	File ID
Aroclor 1016	12674-11-2	ND	0.0500	1.00	U	GC23F-1072-16
Aroclor 1221	11104-28-2	ND	0.0500	1.00	U	GC23F-1072-16
Aroclor 1232	11141-16-5	ND	0.0500	1.00	U	GC23F-1072-16
Aroclor 1242	53469-21-9	ND	0.0500	1.00	U	GC23F-1072-16
Aroclor 1248	12672-29-6	ND	0.0500	1.00	U	GC23F-1072-16
Aroclor 1254	11097-69-1	ND	0.0500	1.00	U	GC23F-1072-16
Aroclor 1260	11096-82-5	ND	0.0500	1.00	U	GC23F-1072-16
Total PCB Amount	1336-36-3	ND		1.00	U	GC23F-1072-16
			Lin	nits		
Surrogate	CAS No.	% Recovery	(%	(o)	\mathbf{Q}^1	File ID
Tetrachloro-meta-xylene	877-09-8	82.3	60.0	-140		GC23F-1072-16
Decachlorobiphenyl	2051-24-3	94.3	60.0	-140		GC23F-1072-16

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592 Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC **Project:** JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33032L)

Lab Sample ID: LCS-69

	Batch ID Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23B-1079-36 SW-846 Method 8082	10/31/2012 03:58	AJM	NA	NA	Phenomenex, Zebron ZB-5, 30 m, 0.25 mm ID, 0.25 µm
Prep 1:	20520 EPA 3535	10/23/2012 09:40	EPC	1000 mL	10.0 mL	NA

		Added	LCS	LCS	Limits
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	Q' (%)
Aroclor 1016	12674-11-2	0.500	0.478	95.7	70.0-130

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits		
Surrogate	CAS No.	% Recovery	(%)	Q File I	D
Tetrachloro-meta-xylene	877-09-8	84.7	60.0-140	GC23B-10	079-36
Decachlorobiphenyl	2051-24-3	93.9	60.0-140	GC23B-10	079-36

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.



Quality Control Results Lab Control Sample

Job Number: 12100343

Pace Analytical Services, Inc.

2190 Technology Drive Schenectady, NY 12308 Phone: 518.346.4592

Fax: 518.381.6055

Client: THE JOHNSON COMPANY, INC Project: JARD - BENNINGTON VT

Client Sample ID: Lab Control Sample (AP33032L)

Lab Sample ID: LCS-69

	Batch ID	Method	Date	Analyst	Init Wt./Vol.	Final Vol.	Column
Analysis 1:	GC23F-1070-36	5 SW-846 Method 8082	10/31/2012 03:58	AJM	NA	NA	Agilent, J&W DB-1, 30 m, 0.25 mm ID, 0.25 μm
Prep 1:	20520	EPA 3535	10/23/2012 09:40	EPC	1000 mL	10.0 mL	NA

		Added	LCS	LCS	Limits	
Analyte Spiked	CAS No.	(ug/L)	(ug/L)	% Rec.	Q' (%)	
Aroclor 1016	12674-11-2	0.500	0.489	97.9	70.0-130	

¹ Qualifier column where '*' denotes value outside the control limits. Note: RPD criteria does not apply if either the sample and duplicate sample are not detected.

			Limits		
Surrogate	CAS No.	% Recovery	(%)	Q¹ Fil	le ID
Tetrachloro-meta-xylene	877-09-8	82.4	60.0-140	GC23F	F-1070-36
Decachlorobiphenyl	2051-24-3	97.3	60.0-140	GC23F	F-1070-36

¹Qualifier column where '*' denotes value outside the control limits or 'D' denotes value was diluted out.

ND: Denotes analyte not detected at a concentration greater than the PQL.

PQL (Practical Quantitation Limit). Denotes lowest analyte concentration reportable for the sample.

NON-HAZARDOUS WASTE MANIFEST

HRS Reference #68 Page 162 of 163

			7	1				,					
A	NON-HAZARDOUS	Generator ID Number	2. Page 1 of	3. Emergency Response			racking Nu						
T	WASTE MANIFEST	VTP000013837	1	(888)888-74		12-1021							
	5. Generator's Name and Mailin	ng Address	Generator's Site Address	s (if different	than mailing address)								
	varmont Dec	artment of Envir	4	4			for ser Jax						
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	Generator's Phone: 6. Transporter 1 Company Nan	16				U.S. EPA ID			-				
	o. Hansporter Company Nam	Precision Industrial Mair	(618) 348	.cana			0010	3181	4				
1	T. T O Non		Fer In It.	(212) 012		U.S. EPA ID		0010	V 10 F	-			
	7. Transporter 2 Company Nan	Clean Venture, Inc		(906) 355	AGOO	1		0.000	2719	2			
				(800) 350	-3000	110 501 15		0000	121 (3	3			
	8. Designated Facility Name ar	d Site Address Cycle Chem	a limits			U.S. EPA ID	Number						
		*											
		217 South F						0000					
	Facility's Phone: (308)	365-5900 Elizabeth N.	J 07206				NJU	0024	20004	0			
				10. Conta	ainers	11. Total	12. Unit						
	9. Waste Shipping Nam	e and Description		No.	Туре	Quantity	Wt./Vol.	54	are Carle	.			
1		Con COT Donator 4						- 50		-			
S.		on DOT Regulated Education				April 1							
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П													
Ш						1 1				-			
Ш	14. GENERATOR'S/OFFERO	R'S CERTIFICATION: I hereby declare that ded, and are in all respects in proper condition	the contents of this consignment ion for transport according to ann'	are fully and accurately de icable international and nat	scribed above tional governi	e by the proper s mental regulation	hipping nam s	e, and are c	lassilied, packi	aged,			
Ш	Generator's/Offeror's Printed/T			ignature	donal govern	mornar rogulation		M	lonth Day	Year			
1	- 1	ypod Hamo	1	· · · · · · · · · · · · · · · · · · ·				1	a T	1			
Y	15. International Shipments			16 17	-				.(1	- Alak			
INT	15. International Shipments	Import to U.S.	Export from										
	Transporter Signature (for exp			Date lear	ving U.S.:								
띮	16. Transporter Acknowledgme								III- D	V			
TRANSPORTER	Transporter 1 Printed/Typed N		S	ignature		1		~	onth Day	Year			
SPC	_ Daniel Sy			1 BVI VA	~	hour			11 08				
A	Transporter 2 Printed/Typed N	ame	S	ignature /				, N	Ionth Day	Year			
H	Ja.												
A	17. Discrepancy							-,-		7			
1	17a. Discrepancy Indication Sp	pace Occasion	Туре	Residue		Partial R	ninotion		Full Reje	action			
Ш		Quantity	L гуре	L Hesique		I Рапіаі н	ejection		L Full neje	ection			
				Manifest Reference	Number:								
\ <u></u>	17b. Alternate Facility (or Gen	erator)		Mentinest Helefelice	HUITIDOI.	U.S. EPA IC) Number						
FACILITY		1											
SC.	- W. J. B.					1							
O F	Facility's Phone:	offite (or Consented						N/	onth Day	Year			
E	17c. Signature of Alternate Fa	anny (or denerator)	4					1	lonun Day	1			
N.													
DESIGNATED													
님													
1													
	18. Designated Facility Owner	or Operator: Certification of receipt of mater	rials covered by the manifest exce	ept as noted in Item 17a									
	18. Designated Facility Owner Printed/Typed Name	or Operator: Certification of receipt of mater		ept as noted in Item 17a Signature				N	fonth Day	Year			